

PUBLIC HEALTH REPORTS

VOL. XXVIII.

DECEMBER 26, 1913.

No. 52.

TUBERCULOSIS IN SWITZERLAND.

RESULTS OF THE CAMPAIGN AGAINST THE DISEASE.

A résumé of the translation of an article appearing in *The Bulletin of the International Office of Public Hygiene*, Paris (Tome V, No. 10, p. 1739-1758, Oct., 1913), under the title "*L'Etat Actuel de la Lutte Contre la Tuberculose en Suisse*," by M. le Dr. F. Schnud, Director of the Swiss Federal Sanitary Service, the Delegate of Switzerland in the Committee of the International Office of Public Hygiene.

By W. C. RUCKER, Assistant Surgeon General, and R. A. KEARNY, Assistant Surgeon, United States Public Health Service.

Researches undertaken toward the sixtieth year of the last century into the mortality from pulmonary tuberculosis in Switzerland did not give a single practical result. It was only after the discovery of the tubercle bacillus, the proof of the transmissibility of tuberculosis, and the success obtained by treatment in the open air, especially in stations of high altitude, that it was possible to establish a practical campaign against this infection.

In 1891 the Swiss Society of Public Utility named a commission to study methods to overcome tuberculosis. This commission was able to inform the public, with the assistance of pamphlets, of the advantages of treatment in sanatoria. A guide was published by the commission for the establishment of sanatoria, especially for the tubercular poor. In 1891, at the time of the celebration commemorating the foundation of the city of Berne, it was decided to create a municipal tuberculosis hospital.

The following sanatoria have been established:

Sanatorium.	Place established.	Year.	Elevation.
			<i>Meters.</i>
Berne.....	Helligenschwendli.....	1895	1,180
Basel.....	Davos.....	1895	1,600
Glaronnais.....	Braunwald.....	1898	1,200
Zurich Canton.....	Wald.....	1899	900
Neuchâtel Canton.....	Malvilliers.....	1903	800
Vaud Canton.....	Leysin.....		1,450
Children's Sanatorium.....	do.....		1,450
Genevese Sanatorium.....	Clairmont.....	1903	1,400
St. Gall.....	Knobelsbühl.....	1909	1,000
Soleure.....	Allerheiligen.....	1910	900
Argovie.....	Barmelweid.....	1912	774
Zoug.....	Aegeri.....	1912	800

The public sanatoria have been greatly enlarged during recent years, particularly those of Wald and Heiligenschwendi. New buildings were built at Arosa for the Canton of Grisons, at Scienes on the Albenna for the Canton of Fribourg, so they will have 1,000 to 1,200 beds, or one bed for every 3,000 inhabitants. The annual running expenses of these 12 public sanatoria, containing about 1,000 beds each, was, in round numbers, about 6,000,000 or 7,000,000 francs, an average of 6,000 to 7,000 francs per bed.

It was found that the expenses were met mostly by voluntary contributions and gifts and that the public resources contributed only a small part.

This means of procuring necessary funds for construction necessitated a close economy. No hygienic measures were neglected, but every kind of luxury was avoided.

In the seven years that elapsed between 1905 and 1911, in the neighborhood of 12,000 cases were cared for in these public sanatoria.

The following figures show the results following the treatment of the sick who were discharged from 1905 to 1911 from the Swiss public sanatoria after being under treatment in them for more than four weeks:

	First stage.	Second stage.	Third stage.	Average.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Improved.....	96.7	86.6	62.6	82.7
Unimproved.....	3.2	12.4	34.4	16.0
Died in sanatoria.....	.1	1.0	3.0	1.3

On the basis of 100 cases treated there were—

37.7 in the first stage of the disease.

30.1 in the second stage of the disease.

32.2 in the third stage of the disease.

The following figures illustrate the immediate economic results obtained in those cases treated (not including children) in the same space of time. It also shows the capacity for work after leaving the sanatorium.

Capacity for work.	First stage.	Second stage.	Third stage.	Average.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Able to perform hard work.....	86.7	58.9	25.6	58.0
Able to perform light work.....	10.3	28.5	34.8	23.9
Able to perform only very light work.....	2.0	11.5	36.6	16.7
Died in sanatorium.....	.1	1.0	3.0	1.4

The three public sanatoria of Heiligenschwendi, Davos, and Wald have during several years carried on investigations as to the permanency of the treatment in the last 11 years. These are the results of this investigation, reported in terms of 100 cases:

Stage.	Condition.	After a stay in the sanatorium of—			
		One year.	Three years.	Six years.	Nine years.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
First.....	Able to work.....	98.5	88.1	84.9	80.3
First.....	Unable to work.....	1.1	4.5	4.1	6.0
First.....	Died.....	.4	7.4	11.0	13.7
Second.....	Able to work.....	88.2	81.5	45.4	32.5
Second.....	Unable to work.....	3.3	2.6	8.8	5.3
Second.....	Died.....	3.5	15.9	45.8	62.2
Third.....	Able to work.....	37.0	25.2	15.7	6.1
Third.....	Unable to work.....	11.1	8.5	4.2	2.4
Third.....	Died.....	51.9	66.3	80.1	91.5
Three stages together	Able to work.....	77.4	62.2	50.2	35.3
	Unable to work.....	4.7	5.4	5.6	4.4
	Died.....	17.9	32.4	44.2	60.3

In 1905 Dr. Burckhardt, of Basel, compared the uniform results obtained in pulmonary tuberculosis cases of the same age and situated in the same surroundings in the Basel polyclinic with those who were cured in the public sanatoria treated in a different way, with or without open-air treatment, in the neighborhood of Basel. The following are the results of this comparison:

Condition.	End of three years.		End of six years.	
	With treatment in sanatorium.	Without treatment in sanatorium.	With treatment in sanatorium.	Without treatment in sanatorium.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Able to do full work.....	79	39	58	21
Not able to do part or full work.....	7	23	7	21
Died.....	14	33	34	55

It was computed that the frequency of intercurrent diseases was the same in those patients receiving and those not receiving treatment in a sanatorium, but in those that received sanatorium treatment these intercurrent diseases were more rarely fatal, which goes to prove that sanatorium treatment increases the resisting power against disease organisms.

The average length of treatment varied in the Swiss public sanatoria between 80 and 100 days (Heiligenschwendi and Allerheiligen) and 150 to 180 days (Davos, Leysin, Clairmont). Of the remainder, the results both immediate and remote are not generally worse in the sanatoria where the length of treatment is shorter. The expense of the Swiss public sanatoria is generally less. The expense varied

in 1909 from 2 francs 45 per day of treatment at Heiligenschwendi to 4 francs 71 at Malvilliers. These figures might be considered as only slightly higher than those of the German, French, and English sanatoria; only a few of the public sanatoria of Sweden and of Norway are less costly for maintenance.

The Swiss public sanatoria are situated in the Alps and in the Jura at altitudes varying from 800 to 1,600 meters above sea level. Near the public sanatoria there are a number of sanatoria for the well-to-do persons. It should also be added that there are several places having therapeutic springs which have the reputation of being efficacious against tuberculosis. The majority of the sanatoria for the well-to-do are found at Davos (18), at Leysin (7), at Arosa (2); there is at Montana on the Sierre (1) and at Ambri-Piatta (1). Near these institutions, many of the towns below have a great number of free establishments, hotels, and boarding houses, where persons afflicted with pulmonary trouble may obtain open-air treatment.

Among the stations where the waters are of value against pulmonary tuberculosis may be cited those of Weissenburg (Simmenthal, Bernese Oberland) and Ternigerbad in Grison Canton.

Between the private and the public sanatoria may be placed those that are open to persons of moderate means. In this respect we might mention those of Erzenberg near Langenbruck in the Jura, and Hartlisberg near Steffisburg on the Thoune. Included in this category are a few foreign sanatoria, mostly at Davos, open to foreigners, such as the German sanatorium at Davos-Wolfgang, the Dutch and English sanatorium at Davos-Platz, and the new German sanatorium under construction at Agra (Tessen).

After the International Association against Tuberculosis was founded in Berlin in 1902, a Swiss national association was founded in the same year, November 22, 1902, with the same object in view, under the title of the Central Swiss Commission for the Campaign against Tuberculosis, and connected itself with the international association. This commission consisted of sanitary authorities, both Federal and cantonal, directors of sanatoria, members of anti-tuberculosis associations, as well as doctors. The object of the commission was to rouse, maintain, and coordinate the antituberculosis movement of Switzerland.

As has been noted many times, it is not sufficient in the control of tuberculosis to rely entirely upon the foundation of sanatoria. Many other institutions are required in this work. The Central Swiss Commission, taking cognizance of this fact, launched a large propaganda in the antituberculosis movement in their country. This propaganda took account of all the measures for the prevention and check of tuberculosis from the youngest age of life and the predisposition to tuberculosis which is met with in certain persons. It included also

the precautions which should be observed, especially those which concern housing, alimentation, bodily hygiene, the prevention of debilitating influences, and the protection of workmen, in order to prevent the appearance of tuberculosis and to combat the malady with success once it has declared itself. The commission considered it to be of utmost importance to educate the general public, and toward this end there was published as a part of this large propaganda a pamphlet, "What shall we do to be saved from tuberculosis?" and a poster, "Prophylaxis of tuberculosis." This poster was placed by the Federal authorities at the disposal of all schools and displayed in a number of public buildings. Wall posters, "Instruction for the prevention of the contagion of tuberculosis in workshops," have been used in a number of factories since 1900 by the Federal factory inspection service.

The commission also put in circulation many popular publications having wide diffusion. Thanks to this free distribution they contributed not a little to the education of the general public.

After the central Swiss commission's program was made known, many of the associations which had been previously founded for erecting and maintaining public sanatoria set themselves to expand their activity along the lines laid down in the program of the central commission. Societies of general interest, and especially the Woman's Association of Public Utility, many sections of the Red Cross, mutual aid and sick benefit societies, included in their program a campaign against tuberculosis, and a number of new associations, cantonal, municipal, and local, were founded to cooperate in the application of the program given above. The results obtained by the activities of the woman's antituberculosis leagues should be noted especially.

In many cities and also in the country, there were created publicity bureaus and dispensaries for the tuberculous and for suspects. These dispensaries provided for the sick the necessary nursing, but allowed them to provide their nourishment and their clothing. They concerned themselves with cleanliness of bedclothes and body, looked after the carrying out of the doctors' orders, such as disinfection of lodgings, the housing of the sick, etc., and finally, above all, they looked after sending children menaced with the disease to the country, where they were placed in charitable institutions and similar establishments.

The actual number of Swiss dispensaries is 120. In the large cities they are regulated and organized on the model of the French and German dispensaries. In cities of less importance and in the country, they depend more for outside help provided by already existing associations whose duty it is to fulfill the duties of the above mentioned dispensaries. It is impossible at this time to give the exact number of persons treated in all the Swiss dispensaries.

The dispensary at Neuchatel has taken up the question of insanitary habitations. As soon as an inspection showed that the lodging of a case of tuberculosis was in an insanitary condition the architect connected with the dispensary was notified. He then went to examine the premises to discover the changes which were necessary and so notified the proprietor, with an order to comply. If this latter direction was unheeded, the sanitary authority of the town was notified.

The first antituberculosis dispensary established in Switzerland was at Neuchatel. Others were founded soon after at Berne, Lausanne, Geneva, Basel, Zurich, St. Gall, and Schaffhouse. In the country they are most numerous in the cantons of Soleure, Zurich, and Basel-Campagne.

In order to prevent infections contracted in hospital and above all to be able to isolate them from their surroundings, efficiently and in time, pavilions for the tuberculous gravely attacked with very severe tuberculosis have been in the course of recent years added to the hospitals in many localities of Switzerland, for example, at Munsterlingen, Geneva, Basel, Bienne, Langnau, Berthoud, and Langenthal. Others are in course of construction; for example, at St. Janier. The entire treatment of the tuberculous is given in the open air. Geneva possesses in the neighborhood of the cantonal hospital a gallery for the air cure which replaces a forest convalescent station.

There has existed since 1903 at Leysin a farm colony attached to the public sanatorium, where cured patients are placed for the time being.

The prevention of tuberculosis in children is carried on in Switzerland by a series of institutions which, thanks to the education which has been developed in the general public, plays an important rôle in carrying out this work. In addition there are a number of dispensaries for infant feeding, day nurseries, and public nurseries. It might be well to cite particularly camps and open-air resorts, which strongly increase the resisting power of debilitated and afflicted children, providing an excellent method for the prevention of tuberculosis.

The work of the open-air camps, founded in 1878 by a philanthropist of Zurich, the pastor Walter Beon, has enjoyed in Switzerland a wonderful favoritism and reputation. In 1912, for example, 10,392 children in 265 camps remained on an average of 204 days. The total expense was 411,290 francs, an average of 40 francs per child and 2 francs per day per child. Certain localities have well-fitted up open-air resorts where children are sent to pass their holidays. During the interval, often during the whole year, these resorts are open to children who require care and who derive benefit from a stay in the country at a proper altitude and with proper diet.

There are also a number of prophylactic institutions playing an important rôle. These are various sanatoria, school sanatoria, resorts, and boarding houses intended to receive debilitated children, the sick and those threatened with tuberculosis. These places are situated in the mountains (Engadine, Davos, Leysin, and other localities) where the double benefit of altitude and sunlight has often brought excellent results, whether in places of moderate elevation (Cantons de Zong, d'Appenzell, de Bale-Campagne, etc.) or upon the plains. In the latter class may be mentioned the establishments adjoining the hot springs (Rheinfelder, Schinznach, Rothenbrunnen, Lavey, etc.), where are other health resorts. Geneva maintains at Cannes upon the Mediterranean an establishment (Dollfuss resort) intended to receive scrofulous and rachitic children, and many cities of Tessin send every year to the border of the Adriatic Sea a certain number of children that require building up. In Switzerland, as elsewhere, it was only after private initiative and after their experience had demonstrated the usefulness of various measures that the public powers undertook the antituberculosis work.

The federal constitution gives to the Confederation the right to legislate on general epidemics. The cantonal and municipal authorities alone may make ordinances looking to the eradication of tuberculosis. A large number of cantons have so far done nothing and rely entirely upon the individual initiative. Others, on the contrary, such as Grison and Berne, have made meritorious efforts in preventing the spread of this disease by legislative measures.

The honor of having been the first municipalities in Switzerland to attack the tuberculosis problem belongs to the civic authorities of Lausanne and Zurich, who in 1895 and 1896 decided that disinfection, which previously had been applied only in the case of infectious diseases, should also be applied to the premises of tuberculous persons after death or upon change of place of residence. They have taken the necessary steps for the disinfection to be done gratuitously in cases of poverty.

In 1897 the Canton of Geneva published instructions upon the dangers of tuberculosis and the methods to be employed in its prevention. In 1900 the municipalities of Davos and Arosa, and in 1903 the municipality of Leysin, made it obligatory to report within 24 hours the death or departure of anyone having tuberculosis, to clean up and disinfect completely the places formerly occupied by tuberculous persons before being occupied again.

The Cantons of Grisons in 1902 and 1904, Neuchatel in 1905, Berne and Zurich in 1907, Thurgovie in 1908, those of Lucerne, Schaffhouse and Glaris in 1909, gave instructions and enacted laws and ordinances relative to tuberculosis. These various regulations required physicians to report active cases of tuberculosis. The disinfection of the

premises of tuberculous persons and the things used by them is obligatory in case of death or change of residence. The bacteriological examination of the excretions of the tubercular poor is facilitated. The cantons contributed a certain proportion of the expenses which were incurred for the community by the application of these measures. It is worth mentioning, particularly, that the Canton of Berne since 1900, the date of the adoption by the people of a law regarding tuberculosis, has done a great deal in preventing the spread of this disease. For example, this Canton provided special tuberculosis services in the district hospitals and has rendered possible the free sanatorium of Berne, which has worked with the other anti-tuberculosis institutions as well as the dispensaries, infant asylums, open-air camps, etc.

Until this time the Confederation, which held no constitutional power in this regard, could not intervene in the campaign against tuberculosis. Still, it took certain measures in preventing bovine tuberculosis. In 1900 the Federal factory inspector published a notice relative to the prevention of tuberculosis in workshops, explaining to laborers the danger of promiscuous spitting and insisted upon cuspidors filled with water.

In 1901 the Federal public health service published instructions relative to the disinfection of buildings with formaldehyde. Later, in 1902, regulations were promulgated providing that in all vehicles and places related to travel (railway cars, tramways, waiting rooms, etc.) notices were to be posted in several languages forbidding spitting. They required the installation of spittoons filled with water in waiting rooms, stations, corridors, etc.

Utilizing the power which was conferred by the Federal law of 1905 for the regulation by ordinances of the commerce of foodstuffs and common things, the Confederation has enacted regulations tending to prevent the spread of tuberculosis by foodstuffs, such as milk, bread, and meat.

The Federal regulation on the commerce of foodstuffs provided that only pure milk might be sold and that all milk obtained from cows afflicted with disease or capable of changing the milk in any way so as to render it harmful to the consumer, such as tuberculosis of the udder, general tuberculosis, etc., should be excluded from sale. Again, it is forbidden in the trade, sale, or handling of milk to employ persons afflicted with a contagious or loathsome disease. The same regulations apply to the making and sale of bread. The local health officers have the power to make sanitary regulations in that which concerns the production, the manipulation, and sale of milk for infants or the sick, and in the manner of caring for the animals which produce it. They also issue instructions for meat inspectors, ordinances for the sale of meat and the products of slaughter-

houses, measures which are necessary to prevent the transmission of tuberculosis by the meat of tuberculous animals.

In view of the partial reduction of tuberculosis and upon the demand of the Swiss Central Antituberculosis Commission, a paragraph has been inserted in the Federal law which has to do with the prevention of disease and accidents. Under this, the Federal authorities may more fully assist those stricken with tuberculosis by allowing them treatment for one year instead of 180 days only.

But the Confederation which was only able to associate itself indirectly with the antituberculosis work was soon able to exercise a direct action. On account of the fact that only a small number of cantons (about one-third) had taken special steps against tuberculosis and that even where certain measures were being taken, the endeavor was full of difficulty resulting from the increased expense which followed, the Federal Assembly instructed the Federal Council in 1909 to find out by what means and in what ways the Confederation could assist in the antituberculosis campaign. In compliance, the Federal Council submitted to the Federal Assembly in November, 1911, a scheme to modify the Federal constitution in the way of augmenting the powers of the Confederation in that which concerned the campaign against the diseases of man and animals. This scheme was adopted by the two councils of the Federal Assembly with very few modifications, and a few months afterwards by the Swiss people themselves. Here is the text of the new constitutional amendment:

The Confederation may take, by legislative means, measures to combat transmissible diseases, wide-spread diseases, and particularly dangerous diseases of man and animals.

The Confederation was thus given the right to legislate not only against general epidemics, as it was in this present case, but also on all transmissible diseases, easily spread and particularly dangerous. It could then, by virtue of the new power which was given it, legislate on that which concerned particularly tuberculosis, enact laws applicable to the whole of Switzerland, and uphold the cantons which had already engaged themselves in the campaign. Under these conditions the promulgation of a Federal law against tuberculosis may be considered as very near.

As may be seen from the foregoing, a great activity in the tuberculosis campaign spread throughout Switzerland. Soon special associations were formed—commissions, women's leagues, mixed leagues—all of which engaged in the campaign. Soon societies of general interest, such as the Woman's Society of Public Utility, sections of the Red Cross, etc., soon associations for the foundation of public sanatoria and lastly the authorities themselves began to take an active hand. Switzerland has actually 30 organizations (associations, leagues, committees, etc.) which occupy themselves exclusively

in the tuberculosis campaign. Besides these there grew at least an equal number of public utility associations, such as the Red Cross, societies aiding the sick, and other beneficiary associations. By conferences, pamphlets, posters, exhibits, etc., these tried to bring about the education of the general public. By dispensaries, societies for the aid of the sick, establishment of municipal infirmaries, etc., means were brought to directly overcome the disease. Lastly, by holiday camps, school kitchens, by sojourn in the country and other means of the same order, methods to promote the resisting power of those susceptible or exposed to the contagion were brought into play. In a word, every method was applied to prevent the spread of the infection. Notwithstanding all the Central Swiss Commission's efforts, it was up to this time impossible to carry on the campaign against tuberculosis in every canton and in all parts of Switzerland. This is the reason why the creation of a permanent central secretary was considered, in which the mission was to make the antituberculosis movement general by having conferences, by having expositions, furnishing information, in centralizing material for study, etc.

If this is obtained, thanks to the attempt of the secretaryship to unify to advantage the organization of the private initiative, hereafter the tuberculosis campaign can be undertaken in places where nothing has been done, and if in other places cantons and confederations carry on the campaign by enactment of appropriate legislation and increased appropriations, we may hope to see the scourge eradicated. At least the efforts up to date have had favorable results. The mortality rate of tuberculosis in Switzerland (including scrofula), as may be seen from statistics, increased on the average during the years 1881 to 1890 to 31 deaths for 10,000 of population. It has subsided since, however, slowly at first, then at the end of 1905 more rapidly to not more than 23 per 10,000 in 1910. If the fact is taken into account that during the first 20 years of the collection of mortality statistics in Switzerland the deaths from tubercular affections other than the pulmonary form were only imperfectly collected, the fall in the tuberculosis mortality in Switzerland during the 20 years from 1890 to 1910 may be computed at about 30 per cent.

The following is the mortality rate from tuberculosis made from complete figures for the last seven quinquennial periods, corrected¹ by calculation and report on the basis of 10,000 inhabitants.

¹ This correction is rendered necessary by the fact that the Swiss statistics specify only the deaths attested by a physician and note all the others under the rubric "Deceased without medical certificate," without other specification (under this head, in 1878, 17.1 of the total deaths were reported, but that proportion has fallen in 1910 to 2.7), by admitting that the proportion of deaths from tuberculosis should be the same among the deaths without medical certificate as among those which are certified by a physician, and by taking into account the differences in the various age classes from the viewpoint of tuberculosis. (See Dr. F. F. Schmid, "The Frequency of Tuberculosis in Switzerland," report of the Congress of Tuberculosis of Berlin, Berlin, 1899, pp. 120-138.)

	Pulmonary tuberculosis.	Other tubercular affections.
1876-1880.....	22.3	5.0
1881-1885.....	22.5	6.9
1886-1890.....	22.5	7.1
1891-1895.....	20.7	7.5
1896-1900.....	19.5	7.4
1901-1905.....	19.0	8.1
1906-1910.....	17.1	7.2

But it is only since the adoption (in 1901) of a new classification of causes of death that we possess exact statistics on the mortality caused by tubercular affections other than pulmonary tuberculosis. Below are shown the results of these statistics:

	Died from pulmonary tuberculosis, complete figures.	Died from other tubercular affections, including scrofula, complete figures.	Together, complete figures.
1901.....	19.1	8.3	27.4
1902.....	18.9	7.9	26.8
1903.....	18.9	8.0	26.9
1904.....	19.9	8.2	27.1
1905.....	19.2	8.2	27.4
1906.....	18.3	7.3	25.6
1907.....	17.1	8.0	25.1
1908.....	17.1	7.0	24.1
1909.....	16.5	7.1	23.6
1910.....	16.3	6.8	23.1

It is seen by the preceding tables that the tuberculosis mortality fell in Switzerland during the periods of 1880 to 1910. If in this regard the cities are compared with the country, it is seen that in general the tuberculosis mortality has diminished more rapidly in the former than in the latter, without doubt because the measures against the disease are better applied in the cities. This is shown in the following table, estimated on a basis of 10,000 persons:

Quinquennial period.	Pulmonary tuberculosis.		Other tubercular affections, including scrofula.	
	Cities of more than 10,000 population.	Remaining portion of Switzerland.	Cities of more than 10,000 population.	Remaining portion of Switzerland.
1891-1895.....	24.8	19.8		
1896-1900.....	23.6	18.5		
1901-1905.....	21.7	18.2	8.2	8.1
1906-1910.....	18.7	16.5	7.0	7.3
Reduction in per cent.....	24.6	16.7	14.8	9.8

The mortality rate varied a great deal between one city and another, as is shown in the following table:

Mortality from pulmonary tuberculosis per 10,000 of population.

City.	1891-1895	1906-1910	Reduction.
			<i>Per cent.</i>
Lucerne.....	21.4	12.6	41
Bale.....	23.6	15.2	36
Winterthur.....	23.3	15.5	33
St. Gall.....	26.3	17.9	32
Zurich.....	22.2	16.0	28
Berns.....	28.6	21.3	26
Lausanne.....	24.7	19.3	21
Fribourg.....	27.4	21.8	20
Bienne.....	28.4	23.9	19
Le Locle.....	15.9	12.1	18
Schaffhouse.....	19.8	16.6	16
Geneva.....	30.7	26.8	13
Chaux de Fonds.....	21.7	19.7	9
Neuchatel.....	19.8	18.0	9
Hersau.....	14.1	17.1	(1)

¹ Increased 21 per cent.

The reduction in the pulmonary tuberculosis mortality affects mostly those under 60 years of age. Above 60 years the mortality rate has a tendency to increase. This would seem to prove that pulmonary tuberculosis attacks a more advanced age now than formerly. This statement is based upon the following table, which gives the mortality rate from pulmonary tuberculosis per 10,000 living of each age class:

Groups of ages.	1896-1899	1906-1908	Increased.	Diminished.
			<i>Per cent.</i>	<i>Per cent.</i>
Under 1 year.....	14.6	9.0	.....	38
1 year.....	10.9	7.3	.....	33
2 to 4 years.....	5.3	2.8	.....	47
5 to 14 years.....	5.1	2.8	.....	45
15 to 19 years.....	20.4	15.5	.....	24
20 to 29 years.....	33.5	25.6	.....	24
30 to 39 years.....	35.7	25.6	.....	28
40 to 49 years.....	31.9	25.1	.....	21
50 to 59 years.....	30.1	23.3	.....	23
60 to 69 years.....	29.7	27.7	.....	7
70 to 79 years.....	19.2	22.7	18	.....
Above 80 years.....	7.9	10.6	34	.....
Male.....	23.4	17.3	.....	26
Female.....	21.9	17.7	.....	19
All groups together.....	22.5	17.5	.....	22

The brunt of the tuberculosis mortality in Switzerland falls on the first five years of life. This mortality, which in 1901 for 10,000 living of this age group was 29, has fallen in 1908 to 18.4. As is shown in the following table, the forms of the disease took part in this diminution:

Mortality in 10,000 population in group of ages considered.

Location.	1901	1908	Reduction. Per cent.
Tuberculosis of brain and meninges.....	15.2	10.0	34
Pulmonary tuberculosis.....	7.6	4.3	43
Acute military tuberculosis.....	1.9	1.3	32
Tuberculosis of intestines and peritoneum.....	2.0	1.1	45
Bone and articular tuberculosis.....	1.2	.7	42
Other locations, including scrofula.....	2.5	1.9	24

It being generally recognized that scrofula is a special form of tuberculosis, there is more inclination to classify the deaths of those due to this disease as resulting from tuberculosis. The mortality from scrofula has diminished considerably during the last few years, while the mortality from glandular tuberculosis has increased. In 1881, for example, 218 deaths were registered as being caused by scrofula; this number has fallen to 38 in 1910. Consequently the deaths due to scrofula should always go in with the count when it is necessary to find out the exact tuberculosis mortality rate of a country. The following table shows the mortality rate by the different age classes and sex from pulmonary tuberculosis and other tubercular affections for the years of 1901 to 1908, the mortality being reported on the basis of 10,000 living of each age class:

Age groups.	Male.			Female.			Both.		
	Pulmonary tuberculosis.	Other locations.	Total.	Pulmonary tuberculosis.	Other locations.	Total.	Pulmonary tuberculosis.	Other locations.	Total.
Under 1 year.....	11.7	31.0	42.7	10.3	26.2	36.5	11.0	28.6	39.6
1 year.....	7.0	22.1	29.1	7.5	20.9	28.4	7.3	21.6	28.6
2 to 4 years.....	3.0	12.1	15.1	3.4	12.4	15.8	3.2	12.3	15.5
5 to 14 years.....	1.9	6.1	8.0	4.6	7.6	12.2	3.2	6.9	10.1
15 to 19 years.....	10.6	5.5	6.1	23.2	8.4	31.6	16.9	7.0	23.9
20 to 29 years.....	23.4	5.3	28.7	30.1	6.1	36.2	26.6	5.7	32.3
30 to 39 years.....	27.2	4.7	31.9	26.1	4.8	30.9	26.7	4.7	31.4
40 to 49 years.....	31.7	5.6	37.3	20.3	4.8	25.1	25.9	5.2	31.1
50 to 59 years.....	31.8	6.4	38.2	19.2	5.9	25.1	25.2	6.1	31.3
60 to 69 years.....	33.4	8.9	42.3	24.5	9.6	34.1	28.6	9.3	37.9
70 to 79 years.....	23.4	9.3	32.7	21.5	12.4	33.9	22.4	11.0	33.4
80 years and above.....	12.6	8.8	21.4	7.7	13.3	21.0	9.9	11.3	21.2
All groups together.....	18.4	7.4	25.8	18.5	8.0	26.5	18.5	7.7	26.2

It is seen that from the fifteenth to the seventy-ninth year deaths from pulmonary tuberculosis predominate, while among children from 0 to 14 years and in the aged of more than 80 years the other tubercular affections caused more deaths. Among children, the deaths from meningeal and brain tuberculosis are most frequent. Among the aged, those caused from bone and articular tuberculosis. At certain ages the tuberculosis mortality rate is slightly higher among

females (26.5 per 10,000) than among males (25.8 per 10,000). At others the mortality rate from pulmonary tuberculosis is practically the same for both sexes (male 18.4, female 18.5, per 10,000). The mortality rate from other tubercular affections is higher among males (7.4 per 10,000).

The mortality from pulmonary tuberculosis of the same age class shows notable differences of one sex from the other. This is shown by the following table, based on 100 tubercular deaths among men and women (from 1901 to 1908):

Age class.	Male.	Female.
0 to 4 years.....	3.6	3.5
5 to 14 years.....	2.1	4.8
15 to 19 years.....	5.6	11.6
20 to 29 years.....	22.3	27.8
30 to 39 years.....	20.5	19.3
40 to 49 years.....	32.0	20.9
50 years and above.....	13.8	12.0

For the deaths produced from tuberculosis in other parts of the body, the differences between the two sexes is less noticeable.

The influence exercised on the tuberculosis mortality by occupation is shown in the following table, in which the districts of Switzerland are grouped according to the proportion of agricultural population and the tuberculosis mortality:

Average annual mortality per 10,000 population from 1905 to 1909.

Proportion of agricultural population.	Districts.	Pulmonary tuberculosis.	Other forms of tuberculosis.	Total.
0-10 per cent.....	6	19.1	7.1	26.2
10-20 per cent.....	23	18.4	7.5	25.9
20-30 per cent.....	15	18.3	7.6	25.9
30-40 per cent.....	37	17.7	7.5	25.2
40-50 per cent.....	34	18.1	7.4	25.5
50-60 per cent.....	27	15.3	6.9	22.2
60-70 per cent.....	26	14.7	7.5	22.2
70-80 per cent.....	7	15.9	6.9	22.8
More than 80 per cent.....	7	13.2	5.7	18.9
Together.....	182	17.6	7.4	25.0

It has been a well-known fact for some time that altitude exercises a beneficial effect on tuberculosis. The following statistics prove this statement. The mortality rate is given, by districts, for the period of 1905 to 1909, according to their altitude:

Mortality per 10,000 population.

Altitudes.	Pulmonary tuberculosis.	Other tubercular affections.	Total.
1. Districts with an altitude less than 200 to 400 meters above the sea....	21.2	7.6	28.8
2. Altitude of 400 to 700 meters above sea level.....	17.3	7.4	24.7
3. Altitude of 700 to 900 meters above sea level.....	16.3	7.2	23.5
4. Altitude of 900 to 1,200 meters above sea level.....	16.4	6.9	23.3
5. Altitude more than 1,200 meters above sea level.....	15.5	5.9	21.4

In reality the number of deaths due to tuberculosis in the higher regions of Switzerland would be less if not raised by the large number of tuberculous persons who, in the hope of prolonging their lives, come from all parts of the country and die in the sanatoria of Davos, Leysen, and Arosa. While it is proper for these persons to do everything to prolong their lives, these deaths should not be charged against the place where they die. If, for example, we consider the district of Oberlandquart, where Davos is situated and where there exists the condition mentioned above, we have not more than in other places having an altitude of 1,200 meters, the mortality being 12 per 10,000 for pulmonary tuberculosis and 17.1 per 10,000 for all forms of tuberculosis.

The mortality from tuberculosis in Switzerland varies naturally a great deal according to place. While, for example, the tuberculosis mortality rate for the whole country averaged for the years 1905 to 1909 25 per 10,000 population, it exceeded 32 per 10,000 in the districts of St. Maurice (32.2), Werdenberg (32.3), Neuveville (32.5), Aigle (33.3), Sargans (33.4), Oberrheinthal (33.8), Oberlandquart (34), Geneva Rive Left (34.4), Porrentruy (36.1), Imboden (Canton of Grisons) (37.8), and in the city of Geneva (39.6). It remained, on the contrary, below 18 per 10,000 in the districts of Pfaffikon (17.4), Reyath (17.3), Etlebuch (16.8), Signau (16.1), Laupen (16), Raron (16), Trachselwad (15.6), Payerne (15.2), Obwalden (14.5), Schleithelm (14.4), Stein (14.1), Viege (13.9), Brigue (13.9), Herens (13.5), Hinterrhein (12.4), Bernina (11.8), and Maloia (11.7).

The differences are most striking if we compare the tuberculosis mortality in the different communities, or still better, if the sections of only one and the same community. The local conditions, and especially those of housing, play a preponderant rôle from the point of view of the frequency of tuberculosis. There is, therefore, a great need in establishing a tuberculosis mortality rate by community and even by sections in that community.

MALARIAL INDEX WORK.

Methods Used in Obtaining Blood, Making Blood Smears, and Staining.

by R. H. von Esdoz, Surgeon, United States Public Health Service.

On a recent visit to several towns and cities in Arkansas and North Carolina, where some intensive studies of malarial fevers were made, the malarial parasite index was obtained by securing specimens of blood from a number of apparently healthy individuals for this determination.

In Arkansas these were obtained from persons who were found congregated at stores, drug stores, physicians' offices, and in a house-to-house canvass. In this way specimens were obtained from 802 persons.

In North Carolina blood smears were obtained mainly from school children attending school, a few by a house-to-house canvass, and on one occasion after a public lecture. In this way specimens were obtained from 3,264 persons.

Several trials were made to obtain specimens by a house-to-house canvass, but this proved unsatisfactory and time-consuming.

The obtaining of blood smears, even after describing its purpose, is not an easy task, as the mere mention of "a drop of blood" creates fear, so that considerable persuasion and explanation have often to be resorted to, which causes much loss of time.

Public lectures and lectures to pupils assembled in the auditorium or school hall on the subject of malaria, its method of spread and prevention, and the purpose of making blood examinations to find malarial carriers explained, prompted many to submit to examination.

It was also promised that the local authorities would be informed by letter and given the names of those who were found to harbor the parasite in the blood, so that a personal, as well as a community, benefit might be derived from such an examination.

In securing blood specimens from school children, it was necessary to obtain them as rapidly as possible, so that very little interruption of class work should occur.

The method used and here described was found to be expeditious, accurate, and gave uniform results.

WORKING EQUIPMENT.

Two to three hundred clean glass slides in slide boxes.

One hundred cubic-centimeter bottle filled with alcohol.

One small package of gauze.

One Hagedorn needle stuck through a cork, with the point of the needle protruding, fitted to a small bottle of alcohol, so that the point can be quickly immersed in alcohol after each puncture.

Steel writing pen stuck in a cork.

History blanks, numbered consecutively.

The form of history blank used is as follows:

Name.....
 Age..... Sex..... Color.....
 Place of birth.....
 Address.....
 Length of residence present address.....
 Previous history of malaria.....
 Remarks (size of spleen if quinine taken).....
 Specimen taken by.....
 Date.....

Technique Employed in Making Blood Smears.

Ear lobe or end of little finger is cleaned. The use of the finger tip was found to be much more expeditious.

Puncture is quickly made with a clean Hagedorn needle.

First drop of blood is wiped off.

A drop of blood is obtained on the polished end edge of a clean slide. The edge with the drop of blood is then applied to the surface of another slide at the middle, and when the blood has spread out along the edge the top slide, held at an angle of 30° to 45° , is pushed with one stroke, fairly rapid, over the surface of the lower slide, thereby making a thin blood smear covering one-half of the slide. The film is dried rapidly and labeled immediately by writing directly into it with an ordinary soft black lead pencil the number corresponding to that on the history blank.

A smear is made over the other half of the same slide from another person in a similar manner. Thus two thin blood smears are made on one slide with an intervening clear space of one-eighth to one-fourth of an inch.

It is not necessary to label the second smear taken, as it will correspond to the next consecutive number, thereby saving time in labeling. For example, the first smear is labeled with an odd number, and the unlabeled smear on the same slide is the even or next number.

A thick blood smear is also made from each individual and two such smears spread on each slide.

The technique for making thick blood smears is as follows:

Obtain a large drop or two of blood on the surface of the glass slide which was used for spreading the thin smear, 1 inch from the end.

With the convex surface end of a steel writing pen stuck in a cork, the blood is spread evenly over a circular area about one-half to three-fourths of an inch in diameter. The pen should be immediately wiped clean after using.

A second thick blood smear is made on the surface of the other end of the same slide in a similar manner.

The first thick smear will show drying on the edge by the time the second smear is made, so that it may be labeled with a soft black

lead pencil by writing directly into it the number corresponding to the labeled (odd number) thin smear and history blank. The second thick smear will be the next even number.

The slides, thick and thin, are placed back to back, with the thick smear uppermost, and then laid in a horizontal position until dry before placing them in a slide box.

Thus is obtained one thin and one thick blood smear from each individual examined.

This method makes for a saving in time in labeling, staining, and examination, as well as a diminution by one-half of the number of slides to be handled and transported.

Two hundred and sixty-four blood smears were obtained on a single day, and often an average of 45 to 48 an hour.

Staining of Blood Smears.

Thin blood smears are fixed by immersion in pure Methyl alcohol one-half to one minute.

A Coplin jar is used, so that 10 slides, or 20 smears, may be fixed at one time.

These slides are then removed, rinsed in running water, and immersed 30 minutes or more in a stain in a Coplin jar, then air dried and examined.

The stain employed is an original Giemsa stain made up as follows, and freshly prepared:

	Cubic centimeters.
0.1 per cent watery solution of eosin.....	5
0.1 per cent watery solution of azur II.....	5
Distilled water.....	40

This gives a good polychrome stain, showing the parasite blue with the chromatin spots deep red. It also stains the leucocytes so that a differential count may be made.

Thick Blood Smears.

The slides with thick blood smears are immersed, 10 at a time, in a Coplin jar in a 1 per cent to a 2 per cent hydrochloric-acid solution in 95 per cent alcohol (method of James).

This solution fixes and decolorizes the films and requires from one-half to one hour.

This solution is poured off and can be reused, and the slides, after decolorization, are washed in running tap water 30 minutes, and then stained by the method as described for thin smears, then dried and examined.

The method described works automatically, requiring little attention, and the results are invariably uniform.

The label, which appears black, being carbon, is unaffected by acids, alcohol, or water, and is easily read, and, in reading the label, one knows at once on which side of the slide the smear is placed.

Examination of Slides.

All preparations are examined with a 2-millimeter oil-immersion lens, in combination with a 3x or a 4x ocular as a searcher.

Thick blood smears are examined from 5 to 10 minutes, and thin blood smears from 20 to 30 minutes.

The taking of a thin and a thick blood smear for this index work has an advantage over thick smears alone.

Thick blood films give a concentration and make for the easier finding of the presence of parasites. A good thick film is one which contains an average of 25 to 30 leucocytes to each field.

Thin blood smears require much more time for examination—about 30 minutes—but from these we can determine—

- (a) Exact species of parasites (young forms).
- (b) Relative number of leucocytes.
- (c) Ascertain differential leucocyte count.
- (d) Note any blood changes.
- (e) Discover some other disease. (Pathological blood disease, *Filaria*.)
- (f) Blood changes apparently due to malarial infection, but negative for parasites owing to effects of quinine.

The results of the findings are noted on each history blank, and, upon the completion of a series from a community, the positive findings reported by name, age, sex, and color, and type of infection found.

If in addition to the presence or absence of malarial parasites blood changes be noted, these also are made available and reported.

The benefit accruing from such examination will naturally reach the individual; as an example of this secondary diagnostic value, the finding of marked eosinophilia as possibly due to intestinal parasitic infection, so common and of such economic importance in the Southern States.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

State Reports for November, 1913.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained, or uncertain.
California:						
Alameda County—						
Hayward.....	1				1	
Livermore.....	3					3
Oakland.....	1				1	
Colusa County.....	1					
Contra Costa County—						
Richmond.....	2				2	
Fresno County—						
Fresno.....	1				1	
Imperial County.....	3				3	
Kern County—						
Bakersfield.....	5				1	4
Los Angeles County.....	2				2	
Los Angeles.....	7				7	
Nevada County—						
Nevada City.....	3				3	
San Francisco.....	3				3	
San Joaquin County.....	6				6	
Lodi.....	1				1	
Stockton.....	16	1			16	
Santa Clara County.....	4				4	
San Jose.....	1					1
Santa Cruz County—						
Santa Cruz.....	1			1		
Stanislaus County.....	1		1			
Modesto.....	1				1	
Tulare County.....	1				1	
Total.....	64	1	1	1	54	8
Massachusetts:						
Bristol County—						
New Bedford.....	1			1		
Worcester County—						
Webster.....	4				4	
Fitchburg.....	1				1	
Total.....	6			1	5	
Michigan:						
Alpena County—						
Alpena.....	3					3
Calhoun County—						
Bedford Township.....	1				1	
Battle Creek.....	10			1	7	
Marshall.....	2				2	

SMALLPOX—Continued.

State Reports for November, 1913—Continued.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained, or uncertain.
Michigan—Continued.						
Cass County—						
Dowagiac.....	3					3
Delta County—						
Gladstone.....	8				1	7
Eaton County—						
Grand Ledge.....	4				4	
Ingham County—						
Lansing.....	3				2	1
Kalamazoo County—						
Cooper Township.....	1				1	
Climax Township.....	4				4	
Marquette County—						
Powell Township.....	60				50	10
Marquette.....	3				3	
Menominee County—						
Menominee.....	10				2	8
Daggett.....	7				4	3
Montcalm County—						
Greenville.....	4				3	1
Monroe County—						
Erie Township.....	1					1
London Township.....	1				1	
Muskegon County—						
Montague.....	1				1	
St. Clair County—						
Emmett Township.....	1				1	
Kenoskee Township.....	3				3	
Riley Township.....	1				1	
St. Clair.....	1				1	
Schoolcraft County—						
Doyle Township.....	5				1	4
Manistique.....	64				55	9
Shiawassee County—						
Owosso.....	1			1		
Wayne County—						
Hamtramck.....	2			1	1	
Detroit.....	23				23	
Total.....	227			3	172	52
Ohio:						
Allen County.....	83				1	82
Athens County.....	16			1	6	9
Belmont County.....	1					1
Clinton County.....	2					2
Coshocton County—						
Coshocton.....	1					1
Delaware County.....	8					8
Franklin County.....	32				32	
Greene County.....	3				3	
Hamilton County—						
Cincinnati.....	1				1	
Hancock County.....	11				7	4
Hocking County.....	4					4
Lawrence County.....	9				1	8
Lucas County.....	42				38	4
Marion County.....	14				2	12
Miami County.....	3					3
Muskingum County.....	5				5	
Perry County.....	1					1
Putnam County.....	56					56
Scioto County.....	6					6
Summit County.....	12					12
Union County.....	7				6	1
Van Wert County.....	34				7	27
Warren County.....	1				1	
Williams County.....	1				1	
Total.....	353			1	111	241

SMALLPOX—Continued.**Kentucky—Leslie County.**

Smallpox is reported to be present in various parts of Leslie County and on account of it some of the county schools have been closed. The control of the disease is reported to be rendered difficult because of a local prejudice against vaccination.

Smallpox is also present in Perry and Letcher Counties.

New York—Niagara Falls.

Acting Asst. Surg. Bingham, of the Public Health Service, reported by telegraph that during the week ended December 20, 1913, eight cases of smallpox had been notified at Niagara Falls, N. Y.

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Mississippi (Nov. 1-30):			South Dakota (Nov. 1-30):		
Counties—			Counties—		
Bolivar.....	8		Codington.....	8	
Lawrence.....	1		Faulk.....	3	
Lee.....	1		Hyde.....	7	
Lowndes.....	3		Kingsbury.....	1	
Marion.....	1		Tripp.....	5	
Noxubee.....	21		Total.....	24	
Oktibbeha.....	3				
Sunflower.....	1		South Carolina (Nov. 1-30):		
Total.....	39		Counties—		
Montana (Nov. 1-30):			Berkley.....	1	
Counties—			Clarendon.....	2	
Blaine.....	8		Marlboro.....	11	
Broodwater.....	1	1	Richmond.....	2	
Carbon.....	9		Spartanburg.....	1	
Cascade.....	5		Union.....	10	
Great Falls.....	7		Total.....	27	
Fergus.....	3		New Jersey (Nov. 1-30):		
Gallatin.....	1		County—		
Hill.....	4		Monmouth.....	3	
Meagher.....	3				
Missoula.....	1				
Musselshell.....	2				
Ravalli.....	9				
Silver Bow.....	2				
Butte.....	9				
Stillwater.....	1				
Total.....	65	1			

City Reports for Week Ended Dec. 6, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.....	3		Milwaukee, Wis.....	26	
Butte, Mont.....	3		Moline, Ill.....	1	
Chattanooga, Tenn.....	3		Nashville, Tenn.....	11	
Chicago, Ill.....	1		Niagara Falls, N. Y.....	3	
Coffeyville, Kans.....	1		Reading, Pa.....	7	
Columbus, Ohio.....	7		Saginaw, Mich.....	1	
Evansville, Ind.....	5		San Francisco, Cal.....	2	
Kansas City, Kans.....	7		Schenectady, N. Y.....	1	
La Crosse, Wis.....	1		Superior, Wis.....	1	
Los Angeles, Cal.....	9		Toledo, Ohio.....	11	
Marinette, Wis.....	8		Washington, D. C.....	1	

TYPHOID FEVER.

State Reports for November, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		Massachusetts—Continued.	
Alameda County—		Hampden County—	
Berkeley.....	1	Agawam.....	3
Hayward.....	1	Chicopee.....	1
Oakland.....	20	Holyoke.....	2
Butte County.....	1	Ludlow.....	2
Gridley.....	3	Palmer.....	2
Kern County—		Springfield.....	2
Taft.....	1	Wilbraham.....	3
Los Angeles County.....	3	Hampshire County—	
Inglewood.....	1	Ware.....	1
Long Beach.....	1	Middlesex County—	
Los Angeles.....	20	Arlington.....	1
Pasadena.....	1	Cambridge.....	5
San Fernando.....	1	Everett.....	3
Watts.....	6	Hopkinton.....	1
Merced County.....	1	Lexington.....	1
Monterey County.....	1	Lowell.....	13
Monterey.....	1	Marlboro.....	5
Riverside County—		Melrose.....	1
Hemet.....	1	Newton.....	1
Sacramento County.....	1	Springfield.....	7
Sacramento.....	1	Wakefield.....	2
San Benito County.....	1	Waltham.....	3
San Bernardino County.....	6	Watertown.....	1
San Diego County—		Norfolk County—	
Chula Vista.....	1	Brookline.....	2
Oceanside.....	1	Cohasset.....	3
San Diego.....	3	Milton.....	1
San Francisco County.....	28	Quincy.....	1
Santa Clara County—		Randolph.....	1
Palo Alto.....	1	Wellesley.....	1
Stanislaus County.....	3	Plymouth County—	
Sutter County.....	2	Brockton.....	3
Tulare County—		Plymouth.....	1
Exeter.....	1	Rockland.....	1
Yuba County—		Suffolk County—	
Wheatland.....	1	Boston.....	65
Total.....	123	Chelsea.....	3
		Winthrop.....	1
Massachusetts:		Worcester County—	
Barnstable County—		Boylston.....	1
Provincetown.....	1	Fitchburg.....	2
Berkshire County—		Leominster.....	1
Adams.....	2	Spencer.....	1
Great Barrington.....	1	Templeton.....	1
North Adams.....	2	Warren.....	1
Pittsfield.....	2	Westboro.....	1
Williamstown.....	1	Worcester.....	5
Bristol County—		Total.....	223
Fairhaven.....	1		
Fall River.....	11	Michigan:	
Freetown.....	2	Allegan County—	
New Bedford.....	2	Lee Township.....	1
North Attleboro.....	6	Alpena County—	
Taunton.....	1	Alpena.....	3
Essex County—		Berrien County—	
Beverly.....	1	Royalton Township.....	1
Danvers.....	1	Benton Harbor.....	2
Gloucester.....	3	Branch County—	
Haverhill.....	3	Bronson Township.....	1
Ipswich.....	2	Charlevoix County—	
Lawrence.....	2	Hudson Township.....	1
Lynn.....	5	Eaton County—	
Marblehead.....	1	Charlotte.....	1
Merrimac.....	1	Genesee County—	
Newburyport.....	4	Vienna Township.....	1
Peabody.....	3	Flint.....	8
Salem.....	2	Gratiot County—	
Franklin County—		Emerson Township.....	1
Greenfield.....	2	Grand Traverse County—	
Montague.....	1	Long Lake Township.....	1
Orange.....	3	Huron County—	
		Port Austin Township.....	3

TYPHOID FEVER—Continued.

State Reports for November, 1913—Continued.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Michigan—Continued.		Mississippi—Continued.	
Ingham County—		Choctaw County.....	2
East Lansing.....	1	Clarke County.....	2
Lansing.....	2	Clay County.....	7
Mason.....	1	Coahoma County.....	4
Ionia County—		Copiah County.....	6
Easton Township.....	3	Covington County.....	1
Ronald Township.....	1	Franklin County.....	2
Ionia.....	3	Greene County.....	1
Iosco County—		Grenada County.....	7
Burleigh Township.....	1	Holmes County.....	2
Oscoda Township.....	1	Issaquena County.....	3
Iron County—		Ittawamba County.....	20
Hematite Township.....	5	Jackson County.....	2
Crystal Falls.....	3	Jasper County.....	1
Kalamazoo County—		Jackson County.....	1
Vicksburg.....	2	Jefferson Davis County.....	8
Kalamazoo.....	4	Jones County.....	11
Kent County—		Lafayette County.....	2
Grand Rapids.....	9	Lamar County.....	4
Lenewee County—		Lauderdale County.....	4
Ogden Township.....	1	Lawrence County.....	5
Rome Township.....	1	Lee County.....	18
Macomb County—		Lincoln County.....	1
Harrison Township.....	2	Marion County.....	4
Richmond Township.....	1	Montgomery County.....	5
Manistee County—		Neshoba County.....	1
Cleon Township.....	3	Noxubee County.....	2
Marquette County—		Oktibbeha County.....	7
Ishpeming.....	1	Panola County.....	4
Negaunee.....	1	Perry County.....	1
Mecosta County—		Pontotoc County.....	1
Hinton Township.....	1	Prentiss County.....	9
Midland County—		Rankin County.....	1
Lincoln Township.....	1	Scott County.....	2
Muskegon County—		Smith County.....	1
Montague.....	1	Sunflower County.....	4
Oakland County—		Tallahatchie County.....	4
Pontiac.....	1	Tate County.....	4
Oceana County—		Tishomingo County.....	17
Crystal Township.....	1	Union County.....	2
Ottawa County—		Wayne County.....	1
Holland.....	1	Wilkinson County.....	1
Saginaw County—		Yazoo County.....	3
Albee Township.....	1		
Saginaw.....	6	Total.....	196
St. Charles.....	3		
St. Clair County—		New Jersey:	
Algonac.....	1	Atlantic County.....	3
Marine City.....	1	Bergen County.....	9
Sanilac County—		Burlington County.....	8
Port Austin.....	1	Camden County.....	10
Tuscola County—		Cape May County.....	1
Elmer Township.....	1	Cumberland County.....	5
Van Buren County—		Essex County.....	28
Lawrence Township.....	2	Gloucester County.....	1
South Haven Township.....	1	Hudson County.....	16
Gobleville.....	1	Hunterdon County.....	5
Washtenaw County—		Mercer County.....	11
Ann Arbor.....	1	Middlesex County.....	15
Wayne County—		Monmouth County.....	12
Highland Park.....	2	Morris County.....	12
Trenton.....	1	Ocean County.....	1
Detroit.....	20	Passaic County.....	1
Wexford County—		Salem County.....	1
Cadillac.....	1	Somerset County.....	2
Total.....	119	Sussex County.....	6
		Union County.....	4
Mississippi:		Warren County.....	
Alcorn County.....	1	Total.....	163
Amite County.....	1		
Bolivar County.....	6		

TYPHOID FEVER—Continued.

State Reports for November—Continued.

Places.	Number of new cases re- ported during month.	Places.	Number of new cases re- ported during month.
Ohio:		Ohio—Continued.	
Adams County.....	6	Pike County.....	9
Allen County.....	4	Portage County.....	3
Ashland County.....	3	Preble County.....	4
Ashtabula County.....	6	Putnam County.....	5
Athens County.....	10	Richland County.....	5
Auglaize County.....	4	Ross County.....	15
Belmont County.....	17	Sandusky County.....	8
Brown County.....	2	Scioto County.....	37
Butler County.....	3	Seneca County.....	2
Carroll County.....	2	Stark County.....	4
Clark County.....	9	Summit County.....	7
Clermont County.....	1	Trumbull County.....	4
Clinton County.....	1	Tuscarawas County.....	8
Columbiana County.....	10	Union County.....	6
Cuyahoga County.....	42	Van Wert County.....	1
Darke County.....	2	Vinton County.....	1
Defiance County.....	7	Warren County.....	1
Erie County—		Washington County.....	7
Sandusky.....	2	Wayne County.....	1
Fairfield County.....	6	Williams County.....	6
Fayette County.....	4	Wood County.....	8
Franklin County.....	14	Wyandot County.....	5
Gallia County.....	5		
Geauga County.....	1	Total.....	538
Greene County.....	1		
Guernsey County—		South Carolina:	
Cambridge.....	2	Abbeville County.....	2
Hamilton County.....	26	Anderson County.....	1
Hardin County.....	4	Barnwell County.....	1
Harrison County.....	7	Charleston County.....	1
Henry County.....	4	Chesterfield County.....	1
Highland County.....	3	Darlington County.....	1
Hocking County.....	23	Greenville County.....	7
Huron County.....	4	Laurens County.....	1
Jackson County.....	7	Newberry County.....	2
Jefferson County.....	7	Oconee County.....	1
Knox County.....	1	Orangeburg County.....	8
Lawrence County.....	16	Pickens County.....	1
Licking County.....	5	Richland County.....	8
Lorain County.....	10	Saluda County.....	3
Lucas County.....	25	Union County.....	1
Mahoning County.....	16	York County.....	1
Marion County.....	4		
Medina County.....	3	Total.....	40
Meigs County.....	4		
Mercer County.....	1	Vermont:	
Miami County.....	3	Addison County.....	3
Monroe County.....	5	Bennington County.....	1
Montgomery County.....	16	Chittenden County.....	3
Morgan County.....	1	Essex County.....	2
Morrow County.....	3	Grand Isle County.....	1
Muskingum County.....	6	Lamoille County.....	1
Noble County.....	8	Rutland County.....	1
Ottawa County.....	2	Windham County.....	3
Panicking County.....	6		
Perry County.....	1	Total.....	15
Pickaway County.....	3		

TYPHOID FEVER—Continued.

City Reports for Week Ended Dec. 6, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.	1		Moline, Ill.	1	
Atlantic City, N. J.		1	Nashville, Tenn.	3	1
Austin, Tex.		1	Newark, N. J.	11	
Baltimore, Md.	17	1	New Bedford, Mass.	1	
Bennington, Vt.	1	1	New Castle, Pa.	1	
Binghamton, N. Y.	2		New Orleans, La.	12	1
Boston, Mass.	6	1	Norristown, Pa.	2	
Buffalo, N. Y.	8	1	Philadelphia, Pa.	17	3
Butte, Mont.	1		Pittsburgh, Pa.	9	7
Chelsea, Mass.		1	Plainfield, N. J.	2	
Chicago, Ill.	46	12	Providence, R. I.	5	
Cincinnati, Ohio.	2		Reading, Pa.	3	
Cleveland, Ohio	3	4	Roanoke, Va.	2	
Columbus, Ohio	4	1	Sacramento, Cal.	4	
Dunkirk, N. Y.	3	1	Saginaw, Mich.	2	
East Orange, N. J.	1		St. Joseph, Mo.	2	
Erie, Pa.	2		St. Louis, Mo.	8	4
Everett, Mass.	1		San Francisco, Cal.	5	1
Fall River, Mass.	2		Springfield, Ill.	1	1
Fitchburg, Mass.	1		Springfield, Mass.		1
Grand Rapids, Mich.	1	2	Toledo, Ohio.	6	1
Kalamazoo, Mich.	1		Trenton, N. J.	1	1
Kansas City, Kans.	3		Washington, D. C.	6	
La Fayette, Ind.	1		West Hoboken, N. J.	1	
Lancaster, Pa.	2		Wheeling, W. Va.		1
Lexington, Ky.	1		Wilkesburg, Pa.		1
Little Rock, Ark.	6		Wilmington, N. C.	3	
Los Angeles, Cal.	9	3	Worcester, Mass.	2	
Lynn, Mass.	3		Yonkers, N. Y.		1
Malden, Mass.	1	1	York, Pa.	4	
Manchester, N. H.		1	Zanesville, Ohio	1	
Milwaukee, Wis.	4	1			

CEREBROSPINAL MENINGITIS.

State Reports for November, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		Mississippi:	
Alameda County—		Lowndes County	1
Oakland	1	Total	1
Los Angeles County	1		
San Francisco County	2	Ohio:	
Total	4	Allen County—	
Massachusetts:		Delphos	1
Bristol County—		Cuyahoga County—	
New Bedford	1	Cleveland	3
Essex County—		Defiance County	1
Danvers	1	Franklin County	3
Haverhill	2	Hamilton County—	
Lynn	1	Cincinnati	1
Peabody	1	Mahoning County	1
Middlesex County—		Miami County	1
Concord	1	Morrow County	1
Malden	2	Seneca County	1
Norfolk County—		Summit County	1
Dedham	1	Total	14
Suffolk County—			
Boston	4		
Total	14		

CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended Dec. 6, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Austin, Tex.	1	.....	Milwaukee, Wis.	1	1
Boston, Mass. ....	.....	1	Nashville, Tenn.	1	1
Bridgeport, Conn.	1	1	New Bedford, Mass.	1	.....
Chicago, Ill.	2	1	Pittsburgh, Pa.	1	1
Cincinnati, Ohio.	1	1	San Francisco, Cal.	2	1
Cumberland, Md.	1	1	South Bethlehem, Pa.	1	.....
Los Angeles, Cal.	1	.....	Worcester, Mass.	1	.....

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for November, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		Michigan—Continued:	
Humboldt County	3	Calhoun County—	
Eureka	3	Clarence Township.....	1
Ferndale	1	Total	4
Los Angeles County.....	1	Mississippi:	
Los Angeles	3	Bolivar County	1
San Diego County—		Lauderdale County.....	1
San Diego	3	Tunica County	1
Total	14	Union County	2
Massachusetts:		Yazoo County	1
Berkshire County—		Total	6
Washington	1	New Jersey:	
Bristol County—		Cumberland County.....	1
Easton	1	Essex County	1
Essex County—		Mercer County	3
Amesbury	1	Monmouth County.....	1
Hampden County—		Warren County	1
Ludlow	3	Total	7
Springfield	1	Ohio:	
Wilbraham	2	Cuyahoga County—	
Hampshire County—		Cleveland	5
Hatfield	1	Delaware County.....	2
Middlesex County—		Guernsey County—	
Arlington	2	Cambridge	1
Cambridge	1	Hamilton County—	
Everett	1	Cincinnati	2
Lowell	1	Huron County—	
Malden	3	Bellevue	1
Newton	1	Pickaway County.....	2
Stow	1	Total	13
Norfolk County—		South Carolina:	
Quincy	1	Newberry County.....	1
Plymouth County—		Oconee County	1
Brockton	1	Total	2
Suffolk County—		Vermont:	
Boston	8	Caledonia County.....	1
Worcester County—		Orleans County	6
Fitchburg	2	Total	7
Leominster	3		
Worcester	3		
Total	38		
Michigan:			
Saginaw County—			
Frankenmuth Township.....	2		
Genesee County—			
Flint	1		

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.**City Reports for Week Ended Dec. 6, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Boston, Mass.....	4	.....	Evansville, Ind.....	1	.....
Brockton, Mass.....	1	.....	Manchester, N. H.....	1	.....
Chicago, Ill.....	1	.....	Philadelphia, Pa.....	1	.....

ERYSIPELAS.**City Reports for Week Ended Dec. 6, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Bayonne, N. J.....	1	.....	New Orleans, La.....	.....	1
Boston, Mass.....	.....	1	Oakland, Cal.....	1	1
Binghamton, N. Y.....	2	.....	Pawtucket, R. I.....	.....	1
Buffalo, N. Y.....	4	3	Philadelphia, Pa.....	12	2
Chicago, Ill.....	7	2	Pittsburgh, Pa.....	2	1
Cincinnati, Ohio.....	3	.....	Reading, Pa.....	1	.....
Cleveland, Ohio.....	8	.....	St. Louis, Mo.....	5	1
Kalamazoo, Mich.....	1	.....	San Francisco, Cal.....	4	.....
Milwaukee, Wis.....	6	.....	York, Pa.....	1	.....

LEPROSY.**Boston, Mass.**

A case of leprosy was notified November 7, 1913, at Boston, Mass., in a male Russian, aged 26 years, who had resided continuously in the United States for a period of seven years, and previously to that period in Russia. The type of the disease was tubercular. The patient was reported November 30, 1913, as remaining in isolation and under supervision of the Boston Board of Health pending removal to Penikese.

PELLAGRA.

During the week ended December 6, 1913, pellagra was notified by cities as follows: Erie, Pa., 1 case; Nashville, Tenn., 1 case with 1 death.

PLAGUE.**Rats Collected and Examined.**

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities					
Oakland.....	Nov. 29, 1913	27	571	441	.....
Berkeley.....	do	2	147	109	.....
San Francisco.....	do	6	1,771	1,313	.....
Washington:					
City—					
Seattle.....	do	.....	515	491	.....

PLAGUE—Continued.**California—Squirrels Collected and Examined.**

During the week ended November 29, 1913, 8 ground squirrels from Alameda County were examined for plague infection. None was found plague-infected.

PNEUMONIA.**City Reports for Week Ended Dec. 6, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y.	1	.....	Pasadena, Cal.	1	1
Binghamton, N. Y.	3	2	Philadelphia, Pa.	30	55
Braddock, Pa.	2	.....	Pittsburgh, Pa.	26	32
Chicago, Ill.	140	77	Reading, Pa.	2	2
Cleveland, Ohio.	18	15	Sacramento, Cal.	1	4
Dunkirk, N. Y.	2	.....	San Diego, Cal.	3	3
Elmira, N. Y.	1	2	San Francisco, Cal.	10	.....
Galesburg, Ill.	3	3	Schenectady, N. Y.	5	1
Grand Rapids, Mich.	1	2	South Bethlehem, Pa.	2	.....
Harrisburg, Pa.	1	3	South Omaha, Nebr.	3	.....
Los Angeles, Cal.	12	8	Steelton, Pa.	2	.....
Manchester, N. H.	2	2	Wilmington, N. C.	4	3
New Castle, Pa.	1	.....	York, Pa.	1	.....

TETANUS.

During the week ended December 6, 1913, tetanus was notified by cities as follows: Nashville, Tenn., 1 death; New Orleans, La., 1 death; St. Louis, Mo., 1 death.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.**State Reports for November, 1913.**

State.	Cases.		
	Scarlet fever.	Measles.	Diphtheria.
California	228	19	245
Massachusetts	747	345	699
Michigan	247	516	787
Mississippi	24	97	110
New Jersey	295	.....	721
Ohio	889	729	1,736
South Carolina	10	34	36
Vermont	60	2	26

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Dec. 6, 1913.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	558,485	183	30	4	2	.....	26	2	22	21
Boston, Mass.	670,585	226	51	1	33	.....	56	3	41	11
Chicago, Ill.	2,185,283	646	171	19	28	.....	121	5	163	78
Cleveland, Ohio.	560,663	189	108	11	27	.....	17	4	32	15
Philadelphia, Pa.	1,549,008	462	51	6	23	1	59	5	85	40
Pittsburgh, Pa.	533,905	189	61	5	47	.....	92	5	40	16
St. Louis, Mo.	687,029	196	74	9	45	5	23	.....	46	14
From 300,000 to 500,000 inhabi- tants:										
Buffalo, N. Y.	423,715	132	15	1	18	.....	9	.....	18	9
Cincinnati, Ohio	364,463	106	35	2	4	1	15	1	22	12
Los Angeles, Cal.	319,198	123	4	2	2	.....	8	.....	52	19
Milwaukee, Wis.	373,557	92	29	3	10	.....	20	2	17	8
Newark, N. J.	347,469	123	36	2	56	1	22	.....	28	15
New Orleans, La.	339,075	127	48	1	9	.....	3	.....	25	14
San Francisco, Cal.	416,912	106	15	1	5	.....	8	.....	24	15
Washington, D. C.	331,069	.....	10	.....	3	.....	16	.....	17	8
From 200,000 to 300,000 inhabi- tants:										
Jersey City, N. J.	267,779	90	.....	2	.....	.....	.....	.....	.....	8
Providence, R. I.	224,326	38	24	.....	10	1	5	.....	4	3
From 100,000 to 200,000 inhabi- tants:										
Bridgeport, Conn.	102,054	31	5	.....	24	.....	1	1	3	1
Cambridge, Mass.	104,839	20	5	.....	3	.....	4	.....	9	4
Columbus, Ohio.	181,548	55	12	.....	.....	.....	6	.....	1	6
Dayton, Ohio	116,577	28	39	1	14	.....	8	.....	3	1
Fall River, Mass.	119,295	27	4	.....	1	.....	8	.....	8	4
Grand Rapids, Mich.	112,571	32	13	3	154	1	17	.....	3	2
Lowell, Mass.	106,294	33	4	2	1	.....	2	.....	.....	2
Nashville, Tenn.	110,364	38	1	.....	.....	.....	5	.....	6	5
Oakland, Cal.	150,174	31	6	2	.....	.....	.....	.....	2	3
Richmond, Va.	127,628	45	3	.....	3	.....	19	.....	5	3
Toledo, Ohio.	168,497	54	7	1	1	.....	1	.....	6	8
Worcester, Mass.	145,986	33	4	2	4	.....	12	1	3	.....
From 50,000 to 100,000 inhabi- tants:										
Altoona, Pa.	52,127	11	.....	.....	.....	.....	3	.....	.....	2
Bayonne, N. J.	55,545	13	9	1	14	.....	6	1	4	1
Brockton, Mass.	50,878	.....	15	.....	1	.....	4	.....	2	.....
Camden, N. J.	94,838	.....	5	.....	.....	.....	1	.....	6	.....
Erie, Pa.	66,525	29	15	.....	1	.....	1	.....	5	.....
Evansville, Ind.	69,647	22	.....	.....	.....	.....	1	.....	.....	2
Harrisburg, Pa.	64,186	24	4	1	.....	.....	2	.....	.....	.....
Hartford, Conn.	98,915	40	15	2	4	.....	2	.....	3	5
Hoboken, N. J.	70,324	15	4	.....	9	.....	2	.....	8	.....
Johnstown, Pa.	55,482	18	14	1	2	.....	1	.....	.....	.....
Kansas City, Kans.	82,331	.....	.....	.....	.....	.....	3	.....	6	.....
Lawrence, Mass.	85,892	.....	5	.....	.....	.....	3	.....	4	2
Lynn, Mass.	89,336	25	5	2	.....	.....	1	.....	4	2
Manchester, N. H.	70,063	26	1	.....	1	.....	3	.....	2	2
New Bedford, Mass.	96,652	26	2	1	.....	.....	9	.....	2	4
Passaic, N. J.	54,773	13	1	1	2	.....	4	.....	2	.....
Pawtucket, R. I.	51,622	.....	2	.....	.....	.....	7	.....	.....	1
Reading, Pa.	96,071	29	10	2	.....	.....	5	.....	1	2
Saginaw, Mich.	50,510	10	9	.....	.....	.....	2	.....	.....	.....
St. Joseph, Mo.	77,403	10	3	.....	2	.....	2	.....	2	1
Schenectady, N. Y.	72,826	23	9	1	1	.....	3	1	.....	2
South Bend, Ind.	53,694	.....	1	.....	1	.....	4	.....	.....	1
Springfield, Ill.	51,678	14	5	.....	.....	.....	.....	.....	.....	1
Springfield, Mass.	88,926	22	5	.....	.....	.....	3	.....	3	.....
Trenton, N. J.	96,815	45	3	.....	.....	.....	14	.....	10	3
Wilkes-Barre, Pa.	67,105	16	5	.....	1	.....	6	.....	4	.....
Yonkers, N. Y.	79,803	29	7	1	28	1	3	.....	1	2
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150	8	.....	.....	.....	.....	4	2	1	1
Auburn, N. Y.	34,668	9	.....	.....	.....	.....	2	.....	.....	1
Aurora, Ill.	29,807	7	1	.....	.....	.....	2	.....	.....	1
Austin, Tex.	29,890	9	6	.....	3	.....	1	.....	.....	.....
Binghamton, N. Y.	48,443	10	2	.....	.....	.....	.....	.....	6	1
Brookline, Mass.	27,792	.....	4	.....	1	.....	3	.....	.....	.....
Butte, Mont.	39,165	20	1	.....	.....	.....	3	.....	.....	4
Chelsea, Mass.	32,452	14	2	.....	.....	.....	2	.....	2	1
Chicopee, Mass.	25,401	.....	1	.....	1	.....	1	.....	1	.....

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Dec. 6, 1913—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhab- itants—Continued.										
Danville, Ill.	27,871	16	5		4		2			3
East Orange, N. J.	34,371		4		16				1	
Elmira, N. Y.	37,176	11	3				4			
Everett, Mass.	33,484	6	2				11		1	1
Fitchburg, Mass.	37,826	12	2				1			
Haverhill, Mass.	44,115		3				1		3	
Kalamazoo, Mich.	39,437	9							4	1
La Crosse, Wis.	30,417	8	2							
Lancaster, Pa.	47,227		3						2	
Lexington, Ky.	35,099	12	2		1		5			1
Little Rock, Ark.	45,941		1		6		3		1	
Lynchburg, Va.	29,494	13	1						2	1
Malden, Mass.	44,404	8	1		2		4			
Newcastle, Pa.	36,280	13	3		1				3	
Newport, Ky.	30,309	8	3						2	2
Newport, R. I.	27,149	6	1							
Newton, Mass.	39,806	6	2		1		2		1	1
Niagara Falls, N. Y.	30,445	11	6				2			
Norristown, Pa.	27,875	5	2		3		1			
Orange, N. J.	29,630	9	1		2					
Pasadena, Cal.	30,291	9								
Pittsfield, Mass.	32,121	9			1		1		1	
Portsmouth, Va.	33,190	7	1				3			
Racine, Wis.	38,002	4	1				4			
Roanoke, Va.	34,874	9	1				4			1
Sacramento, Cal.	44,696	27								3
San Diego, Cal.	39,578	8	2						5	5
South Omaha, Nebr.	26,259	14								
Superior, Wis.	40,384	5					3			
Taunton, Mass.	34,259	7	1				4			
Waltham, Mass.	27,834		1		1		3			
West Hoboken, N. J.	35,403		2							
Wheeling, W. Va.	41,641	12	8				2		1	1
Wilmington, N. C.	25,748	10	1		10		2		1	1
York, Pa.	44,750		3						8	
Zanesville, Ohio	28,026		4							
Less than 25,000 inhabitants:										
Alameda, Cal.	23,383	9					1		1	1
Ann Arbor, Mich.	14,817	9	1				3	1	6	
Beaver Falls, Pa.	12,191	0	1						1	
Bennington, Vt.	8,698	7								
Braddock, Pa.	19,357		5		1		4			
Cambridge, Ohio.	11,327	0					3			
Clinton, Mass.	13,075						1			1
Coffeyville, Kans.	12,687		1							
Concord, N. H.	21,497	6	3	1						
Cumberland Md.	21,839	5	6	2	1		11		1	
Dunkirk, N. Y.	17,221	5	1		39		2			
Franklin, N. H.	6,132	3								
Galesburg, Ill.	22,089		1						2	2
Gloucester, Mass.	24,398	4								1
Harrison, N. J.	14,498	3	1		2		1			
Kearny, N. J.	18,659		2		25				2	
La Fayette, Ind.	20,081	7	1							
Marinette, Wis.	14,610	1					1			
Medford, Mass.	23,150	5					3			
Melrose, Mass.	15,715	3	1				4			1
Moline, Ill.	24,199	3	1						1	
Montclair, N. J.	21,550	8					4		2	1
Morristown, N. J.	12,507	6								
Nanticoke, Pa.	18,877	3	2				1			
Newburyport, Mass.	14,949	12								1
North Adams, Mass.	22,019	6	2	2						
Northampton, Mass.	19,431	4							1	1
Plainfield, N. J.	20,550	5					1		1	
Portsmouth, N. H.	11,289				2					
Pottstown, Pa.	15,599	4								
Rutland, Vt.	13,546	3	7	1			1			
Saratoga Springs, N. Y.	12,683	5								1
South Bethlehem, Pa.	19,973	5	2		1		2		5	
Steelton, Pa.	14,246	1	1							
Wilkesburg, Pa.	18,924	7	3				1			
Woburn, Mass.	15,308	7								

FOREIGN REPORTS.

AUSTRIA-HUNGARY.

Status of Cholera.

Cholera has been notified in Austria-Hungary as follows: Bosnia-Herzegovina, November 6 to 12, 1913, 8 cases; Croatia-Slavonia, November 3 to 17, 1913, 23 cases with 9 deaths; Hungary, November 2 to 8, 1913, 51 cases with 22 deaths.

CHINA.

Examination of Rats—Shanghai.

During the week ended November 15, 1913, 277 rats were examined at Shanghai for plague infection. Of this number 6 were found plague infected.

ECUADOR.

Plague—Yellow Fever.

Plague and yellow fever have been notified in Ecuador as follows:

MONTH OF OCTOBER, 1913.

Plague.—Guayaquil, 108 cases with 23 deaths; Yaguachi, 4 cases with 3 deaths.

Yellow fever.—Guayaquil, 3 cases; Milagro, 1 case; Naranjito, 1 case with 1 death.

GREAT BRITAIN.

Plague in Rodents—London.

Rats are being regularly trapped and poisoned in the vicinity of the principal docks in London. Rats caught are also being examined bacteriologically. During the year 1911, 1,250 rats were examined and 1 was found infected with plague. During the year 1912, 1,310 rats were examined and 13 found plague infected. It is reported that only 2 infected rats have been found this year, the last having been trapped on or about November 12, 1913. During the past six years infected rats have been found each year among those trapped along the London docks.

GREECE.

Typhus Fever—Patras.

Two deaths from typhus fever were notified at Patras December 15, 1913.

JAVA.

Status of Plague.

Plague has been notified in east Java, as follows:

MONTH OF OCTOBER, 1913.

Districts.	Cases.	Deaths.
Kediri.....	319	290
Madison.....	145	126
Malang.....	830	783
Surabaya.....	71	72
Total.....	1,365	1,271

TURKEY IN ASIA.

Plague—Beirut.

A case of plague was notified, November 26, 1913, at Beirut.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Dec. 26, 1913.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina.....				Nov. 6-12, 8 cases.
Croatia-Slavonia—				
Pozena—				
Bebrina.....	Oct. 6-12.....	1		
Brod.....	Oct. 21-Nov. 3.....	5	1	
Davor.....	Oct. 13-20.....	1	1	
Dolina.....	Oct. 6-Nov. 3.....	2	2	
Macovac.....	Oct. 6-20.....	11	2	
Syrmian—				
Adasevci.....	Oct. 16-Nov. 17.....	40	20	
Batajnica.....	Oct. 23-Nov. 3.....	1		
Bosnjaci, Zupenga district.	Oct. 6-12.....	1		
Bosut.....	do.....	1		
Cerna.....	Oct. 6-Nov. 17.....	5	1	
Gibrac.....	Oct. 6-12.....	1	1	
Galubinci.....	Oct. 6-20.....	6		
Gradiste.....	Oct. 23-Nov. 3.....	1		
Ilinci.....	Oct. 6-12.....	2	1	
Kupinovo.....	Oct. 6-20.....	3	1	
Kuzmin.....	do.....	9	6	
Lacarac.....	Oct. 6-Nov. 3.....	35	17	
Lipovac.....	Oct. 13-20.....	1	1	
Martinci.....	Oct. 6-20.....	3	3	
Morovic.....	Oct. 6-Nov. 10.....	2	1	
Novo Karlovci.....	Oct. 13-20.....	1	1	
Novo Slankamen.....	Oct. 6-Nov. 3.....	2	1	
Puntici.....	Oct. 21-27.....	1	1	
Semlin.....	Oct. 6-27.....	10	4	
Sikerevci.....	Oct. 23-Nov. 10.....	3	2	
Tvornik.....	Oct. 13-Nov. 10.....	6	3	
Vinkovci.....	Oct. 6-12.....	4	2	
Vitrovitica—				
Dobrovci.....	Oct. 6-27.....	5	1	
Esseg.....	Oct. 13-Nov. 10.....	3		
Hungary—				
Abajan-Torna—				
Gagyvendegy.....	Oct. 19-25.....	1		
Arad.....	Oct. 12-18.....	1	1	
Bacs-Bodrog—				
Dunacsab.....	Nov. 2-8.....	3	1	
Mohol.....	Oct. 19-25.....	1		
Mozsor.....	Oct. 26-Nov. 1.....	1		
Oplanka.....	Oct. 12-18.....	1	1	
Szond.....	Oct. 25-Nov. 1.....	3	3	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended Dec. 26, 1913—Continued.

CHOLERA—Continued.

Places.	Date	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Hungary—Continued.				
Baranga—				
Himeshaza.....	Nov. 2-8.....	1	.....
Mohacs.....	Oct. 19-Nov. 8.....	15	4	
Bereg—				
Bardhaza.....	Nov. 2-8.....	1	.....
Csetfalva.....	Oct. 19-Nov. 1.....	1	.....
Felsovereczke.....	Oct. 26-Nov. 1.....	1	.....
Szolyva.....	Oct. 19-Nov. 1.....	2	2	
Zugo.....	Oct. 12-25.....	6	1	
Bihar—				
Ermibhalyfalva.....	.....do.....	1	.....
Borsod—				
Alorsolcza.....	Oct. 12-Nov. 1.....	5	1	
Sajolad.....	Oct. 12-18.....	.....	1	
Budapest—				
Budapest.....	Oct. 12-25.....	4	1	
Csongrad—				
Csongrad.....	Oct. 19-25.....	1	.....
Esztergom—				
Labatlan.....	Oct. 19-Nov. 1.....	3	1	
Muzsila.....	Oct. 26-Nov. 1.....	1	.....
Gyor—				
Raro.....	Oct. 12-18.....	1	.....
Hunyad—				
Bablonia.....	Oct. 19-25.....	1	.....
Jasz-Nagykun-Szolnok—				
Szolnok.....	Oct. 12-Nov. 8.....	3	2	
Tiszabo.....	Oct. 19-Nov. 1.....	4	2	
Tiszabura.....	Oct. 12-Nov. 4.....	7	5	
Tiszaroff.....	Oct. 12-Nov. 1.....	4	4	
Komarom—				
Szony.....	Oct. 19-25.....	1	.....
Tardos.....	.....do.....	1	.....
Krasso-Szoreny—				
Illyed.....	Oct. 12-Nov. 1.....	6	4	
Nagylaposnok.....	.....do.....	6	1	
Neramezo.....	Oct. 12-25.....	5	4	
Neramogyros.....	Oct. 12-18.....	2	2	
Szaszka.....	Oct. 19-25.....	1	.....
Maramoros—				
Felsovico.....	Oct. 26-Nov. 1.....	1	1	
Pest-Pilis—				
Budafolk.....	Oct. 25-Nov. 1.....	1	1	
Ordas.....	Oct. 19-25.....	1	1	
Temes—				
Deliblat.....	Oct. 12-25.....	4	5	
Galya.....	Oct. 12-18.....	4	1	
Gerabenez.....	Oct. 12-25.....	10	6	
Karasjeszeno.....	Oct. 12-18.....	2	2	
Homokos.....	Oct. 19-25.....	1	1	
Temesveralja.....	Oct. 12-Nov. 1.....	5	3	
Varasliget.....	Nov. 2-8.....	1	1	
Tolona—				
Tolona.....	Oct. 12-18.....	1	1	
Torontal—				
Aracs.....	Oct. 19-Nov. 1.....	1	1	
Banlak.....	Oct. 19-25.....	1	1	
Csoka.....	Nov. 2-8.....	2	1	
Tiszasszentmiklos.....	.....do.....	3	1	
Torontalsziget.....	.....do.....	2	2	
Ung—				
Alsokunkocz.....	Oct. 26-Nov. 1.....	1	1	
Drugethaza.....	Oct. 12-18.....	1	.....
Harapas.....	Oct. 19-Nov. 1.....	.....	1	
Szobranecz.....	Oct. 19-25.....	1	.....
Unglovasd.....	.....do.....	8	5	
Ungvar.....	.....do.....	1	.....
Ujvidek—				
Neusatz.....	Oct. 12-18.....	1	1	
Zemplen—				
Kesznyeten.....	.....do.....	1	1	
Tokaj.....	Oct. 19-Nov. 8.....	2	1	
Toketerebes.....	Oct. 12-Nov. 1.....	1	.....
Bulgaria.....				Total, Sept. 8-Oct. 27: Cases, 10,987; deaths, 3,577.
Varna.....				Nov. 14, present.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Dec. 26, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Colombo:				
Ceylon.....	Nov. 2-8.....	3	1	
Dutch East Indies:				
Java.....				
Batavia.....	.....do.....	10	8	
India:				
Provinces.....				Total, Jan. 1-July 31: Deaths 118,004.
Calcutta.....	Oct. 19-Nov. 8.....		37	
Negapatam.....	Oct. 5-18.....		6	
Roumania:				Including previous reports.
Annem.....	Aug. 30-Sept. 16.....	47	27	
Annexed territory.....	Sept. 25-Oct. 23.....	70	64	
Arges.....	Aug. 22-Oct. 15.....	59	17	
Bacau.....	Aug. 30-Sept. 5.....	3	2	
Braila.....	Aug. 30-Oct. 23.....	265	139	
Bucharest.....	Aug. 5-14.....	1	1	
Buzau.....	Aug. 30-Oct. 15.....	79	40	
Constanta.....	Aug. 30-Oct. 23.....	114	102	
Covurlui.....	Aug. 30-Oct. 15.....	21	15	
Dambovita.....	Aug. 22-Oct. 15.....	22	16	
Dolj.....	Aug. 13-Oct. 15.....	1,428	652	
Falcin.....	Sept. 6-12.....	1	1	
Galatz.....	Aug. 22-Sept. 2.....	34	6	
Gorj.....	Sept. 6-Oct. 15.....	23	18	
Gostavatu.....	Aug. 13.....	1	1	
Ilfov.....	Aug. 22-Oct. 15.....	83	38	
Kustenje.....	Sept. 3-12.....	8	1	
Jalomita.....	Aug. 22-Oct. 15.....	440	183	
Mehedinti.....	Aug. 30-Oct. 15.....	125	76	
Muscel.....	Sept. 17-Oct. 1.....	1	1	
Olt.....	Aug. 22-Oct. 23.....	270	81	
Parvali.....	Aug. 13.....	1	1	
Prahova.....	Sept. 6-Oct. 1.....	30	22	
Punta.....	Aug. 22-Oct. 15.....	20	5	
Rabunesti.....	Aug. 13.....	3	1	
Roman.....	Sept. 6-12.....		1	
Romanati.....	Aug. 22-Oct. 23.....	934	600	
R. Sarat.....	Aug. 22-Oct. 15.....	89	38	
Silistria.....	Aug. 1.....	26		
Stephanesti.....	Aug. 1-14.....	18	7	
Sulina.....	Aug. 1-24.....	56		
Tecuci.....	Aug. 30-Oct. 1.....	13	10	
Teleorman.....	Aug. 22-Oct. 23.....	652	231	
Totlajec.....	Aug. 13.....	1		
Tulcea.....	Aug. 22-Oct. 23.....	22	17	
Turnu-Magurele.....	Aug. 5.....		1	
Tutova.....	Aug. 30-Oct. 9.....	14	4	
Valcea.....	Aug. 22-Oct. 23.....	81	38	
Viasora-Teleorman.....	Aug. 5.....	3		
Visina.....	Aug. 13.....	2		
Vlasca.....	Aug. 22-Oct. 23.....	430	252	
Servia:				July 4-Nov. 9: Cases 4,792; deaths 1,928.
Districts—				
Belgrade.....	Sept. 28-Oct. 18.....	49	10	
Belgrade.....	.....do.....	81	26	
Kraina.....	Oct. 5-11.....	6	5	
Kragujevatz.....	Sept. 28-Oct. 18.....	29	6	
Krajina.....	.....do.....	34	20	
Kroushevatz.....	Sept. 28-Oct. 11.....	15	6	
Morava.....	Sept. 28-Oct. 18.....	53	13	
Niche.....	.....do.....	81	28	
Onjitz.....	July 22-Sept. 27.....	30	20	
Piot.....	Sept. 28-Oct. 18.....	116	18	
Podrigne.....	.....do.....	48	12	
Pojarvatz.....	.....do.....	131	53	
Roudnik.....	.....do.....	10	5	
Smederevo.....	.....do.....	15	3	
Tchatchak.....	.....do.....	5	4	
Timok.....	.....do.....	45	18	
Toplitza.....	.....do.....	30	1	
Uzica.....	.....do.....	3	2	
Waljevo.....	.....do.....	14	7	
Wragne.....	.....do.....	11	8	
Siam:				
Bangkok.....	Oct. 5-Nov. 1.....		7	
Turkey in Europe:				
Constantinople.....	Nov. 3-23.....	21	13	Including 5 deaths previously reported.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Dec. 26, 1913—Continued.****YELLOW FEVER.**

Places.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Ceara.....	Oct. 1-31.....		1	
Pernambuco.....	Oct. 16-31.....		1	
Ecuador:				
Guayaquil.....	Oct. 1-31.....	3		
Milagro.....	do.....	1		
Naranjito.....	do.....	1	1	
Trinidad:				
Brighton.....	Dec. 12.....	1		

PLAGUE.

Brazil:					
Bahia.....	Nov. 16-22.....	5	4		
China:					
Canton.....	July 1-31.....		47		
Dutch East Indies:					
Java—					
Kediri.....	Oct. 1-31.....	319	290		
Madloen.....	do.....	145	126		
Malang.....	do.....	830	783		
Surabaya.....	do.....	71	72		
Ecuador:					
Guayaquil.....	do.....	108	33		
Yaguachi.....	do.....	4	1		
Egypt.....					Total Jan. 1-Nov. 26: Cases, 649; deaths, 303.
Alexandria.....	Oct. 28.....		1		
Port Said.....	Sept. 10-Oct. 15.....	2	4		
Provinces—					
Assiout.....	Nov. 12-17.....	1	1		
Behera.....	Oct. 2.....	4	3		
Fayoum.....	Oct. 11.....		2		
Garbieh.....	Oct. 23-Nov. 26.....	10	1		
Menouf.....	Aug. 23-Nov. 4.....	3	2		
Indo-China:					
Saigon.....	Oct. 27-Nov. 10.....	15	13		
Japan:					
Kobe.....	Nov. 17-23.....	4	3		
Mauritius.....	Sept. 26-Nov. 5.....	87	60		Oct. 25, 5 fatal cases, pneumonic.
Siam:					
Bangkok.....	Oct. 5-Nov. 1.....		1		
Turkey in Asia:					
Beirut.....	Nov. 26.....	1			

SMALLPOX.

Arabia:					
Aden.....	Nov. 18-24.....	2	1		
Australia:					
Sydney.....	Oct. 31.....				Still present.
Brazil:					
Bahia.....	Nov. 16-22.....	3			
Para.....	Nov. 7-29.....	9	8		
Pernambuco.....	Oct. 16-31.....		21		
Belgium:					
Liege.....	Nov. 23-29.....		1		
Canada:					
Hamilton.....	Nov. 1-30.....	9			
Ottawa.....	Dec. 1-6.....	2			
Dutch East Indies:					
Batavia.....	Nov. 2-8.....	5	2		
Mexico:					
Mexico.....	Oct. 19-25.....	4	3		
New Zealand:					
Auckland, district.....	May 1-Aug. 21.....	116	27		Sept. 5, still present.
Russia:					
St. Petersburg.....	Nov. 16-22.....	3			
Warsaw.....	Sept. 28-Oct. 4.....	6	2		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Dec. 26, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia:				
Mersina.....	Nov. 16-29.....		3	
Smyrna.....	Sept. 1-Nov. 15....		120	
Tarsus.....	Nov. 22.....			Present.
Turkey in Europe:				
Constantinople.....	Nov. 9-15.....		2	

Reports Received from June 28 to Dec. 26, 1913.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Hodeidah.....	Aug. 27-Sept. 4....	3	2	
Do.....	Aug. 20-Sept. 4....	123	21	Among the military at quarantine.
Austria-Hungary:				
Bosnia-Herzegovina—				Nov. 6-12, 8 cases.
Bijela.....	Aug. 16-Oct. 21....	11		
Bojancic.....	Sept. 30-Oct. 13....	2		
Bosnisch Samac.....	Aug. 16-Sept. 15....	7	1	
Brecko.....	Aug. 1-Oct. 31....	50	14	
Brezovopolje.....	Sept. 1-30.....	1		
Brod.....	Sept. 30-Oct. 19....	2		
Buskinje.....	Aug. 1.....	1		
Creveno Brodo.....	Aug. 23-Sept. 6....	1		
Dereventa.....	Oct. 16-31.....	6	3	
Donja Skukva.....	Aug. 16-27.....	1	1	
Golovac.....	Sept. 1-30.....	1		
Gornja Tuzla.....	Aug. 1-Sept. 7....	6	1	
Gracamea.....	Aug. 16-27.....	1		
Gracanica.....	Sept. 30-Oct. 31....	6	2	
Gradista.....	Oct. 16-31.....	2	2	
Janja.....	Aug. 23-Sept. 29....	5		
Kostajnica.....	Sept. 30-Oct. 13....	2		
Labuca.....	do.....	1		
Ljubaca.....	Aug. 23-Sept. 6....	1		
Morac.....	do.....	2		
Orasje.....	Aug. 16-Sept. 29....	18	1	
Poloj.....	Oct. 20.....	1		
Tuzla.....	Aug. 23-Sept. 29....	2		
Uljice.....	Aug. 16-28.....	1		
Vidovice.....	Aug. 16-Sept. 29....	9		
Vusic Dolnji.....	Aug. 16-Sept. 7....	3		
Vusic Gornji.....	Aug. 16-Sept. 15....	4		
Croatia-Slavonia.....				Total Oct. 6-12: Cases, 62; deaths, 22.
Pozanga—				
Bebrina.....	Oct. 6-12.....	1		
Brod.....	Sept. 29-Nov. 3....	9	1	
Davor.....	Sept. 29-Oct. 20....	3	1	
Dolina.....	Oct. 6-Nov. 3....	3	2	
Jasenovac.....	Sept. 22-Oct. 5....	2	2	
Macovac.....	Oct. 6-20.....	11	2	
Novska.....	Sept. 22-28.....	1	1	
Syrmien—				
Adasevci.....	Sept. 8-Nov. 17....	52	27	
Alt Slankamen.....	Aug. 16.....	2		
Bacinci.....	Sept. 8-14.....	5	3	
Batajnica.....	Oct. 23-Nov. 3....	1		
Bebrina.....	Sept. 1-7.....	1	1	
Beska.....	Sept. 14-28.....	2		
Bosnjaci, Mitrovica district.....	do.....	1		
Bosnjaci, Zupenja district.....	Aug. 16-Oct. 12....	40	13	
Bosut.....	Aug. 25-Oct. 12....	5	2	
Cerna.....	Sept. 22-Nov. 17....	14	1	
Cortanovci.....	Aug. 25-Sept. 23....	6	3	
Djakova.....	Aug. 25-Sept. 2....	1		
Drenovci.....	Sept. 14-28.....	6	2	
Galubinci.....	Sept. 8-Oct. 20....	24	6	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Dec. 26, 1913—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Croatia-Slavonia—Contd.				
Syrmien—Continued.				
Gibrac.....	Oct. 6-12.....	1	1	
Grad, Mitrovica district.	Sept. 1-14.....	2	1	
Grad, Zemum district.	Sept. 8-14.....	1	1	
Gradiste.....	Oct. 28-Nov. 3.....	1		
Ilinci.....	Aug. 28-Oct. 12.....	4	1	
Klenac.....	Sept. 29-Oct. 4.....	2	2	
Kreevna.....	July 31.....	5	3	
Kupinovo.....	Aug. 17-Oct. 20.....	5	2	
Kutina.....	Aug. 25-Sept. 2.....	1		
Kuzmin.....	Sept. 1-Oct. 20.....	131	61	
Lacarak.....	Aug. 25-Nov. 3.....	48	18	
Lipovac.....	Oct. 13-20.....	1	1	
Martinci.....	Aug. 16-Oct. 20.....	22	16	
Micanovici.....	Sept. 29-Oct. 5.....	2		
Mitrovica.....	July 15-Sept. 28.....	10	5	
Morovic.....	Sept. 14-Nov. 10.....	7	2	
Novo Karlovci.....	Aug. 25-Oct. 20.....	31	19	
Novo Slankamen.....	Sept. 8-Nov. 3.....	3	2	
Ogar, Ruma district.....	Sept. 8-14.....	2	1	
Ogar, Sid district.....	Sept. 8-Oct. 5.....	17	5	
Osiek.....	Sept. 22-28.....	3	1	
Otok.....	Sept. 1-7.....	2	1	
Podgajci.....	Aug. 16-Sept. 14.....	3	2	
Puntici.....	Oct. 21-27.....	1	1	
Raca.....	Sept. 22-28.....	1	1	
Rivica.....	Sept. 8-14.....	2	2	
Semlin.....	Aug. 25-Oct. 27.....	12	6	
Sid.....	Sept. 29-Oct. 5.....	1		
Sikerevci.....	Oct. 28-Nov. 10.....	3	2	
Siskovci.....	Sept. 22-Oct. 5.....	4	2	
Tovarnik.....	Sept. 14-Nov. 6.....	9	5	
Vinkovci.....	Sept. 8-Oct. 12.....	5	3	
Vojka.....	Sept. 14-22.....	1		
Vukovar Argoviste.....	do.....	1	1	
Zupinge.....	Sept. 22-25.....			Present.
Vitrovitica—				
Dobrovic.....	Oct. 6-27.....	5	1	
Esseg.....	Oct. 13-Nov. 10.....	3		
Crownland—				
Bohemia—				
Marienbad.....	Sept. 13.....	1		
Weinberge.....	Sept. 27.....	1	1	
Dalmatia—				
Cattaro.....	Aug. 6.....	1	1	
Gallcia—				
Skole—				
Oporzec.....	Sept. 10-Oct. 6.....	15	9	
Slawako.....	do.....	1		
Tuchla.....	Sept. 18-Oct. 6.....	2		
Tucholka.....	Sept. 10-Oct. 6.....	2	1	
Wyzlow.....	do.....	1	1	
Lower Austria—				
Vienna.....	Aug. 4.....	1		
Hungary				
Abajan-Torna—				
Gagyvendegy.....	Oct. 19-25.....	1		
Arad.....	Oct. 12-18.....	1	1	
Bacs-Bodrog—				
Ada.....	Sept. 7-13.....	2		
Apatin.....	Sept. 29-Oct. 4.....	3		
Bacs.....	Sept. 14-27.....	3		
Csurog.....	Sept. 2-Oct. 4.....	20	2	
Dunacsebb.....	Nov. 2-8.....	3	1	
Kolpeny.....	Sept. 14-Oct. 4.....	2		
Mohol.....	Oct. 19-25.....	1		
Mozsor.....	Oct. 28-Nov. 1.....	1		
Obecse.....	Sept. 7-Oct. 4.....	7		
Oplanka.....	Oct. 12-18.....	1	1	
Petroz.....	Sept. 7-20.....	2	1	
Szenttamás.....	Sept. 14-Oct. 4.....	31		
Szond.....	Oct. 28-Nov. 1.....	3	3	
Temerin.....	Sept. 14-Oct. 4.....	2		
				Total Sept. 1-Nov. 8: Cases, 615; deaths, 102. Deaths not fully reported.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Hungary—Continued.				
Baranya—				
Himesbaza.....	Nov. 2-8.....	1	.....
Mohacs.....	Oct. 19-Nov. 8.....	15	4	
Bereg—				
Alsólerecke.....	Sept. 21-27.....	1	.....
Bardhaza.....	Nov. 2-8.....	1	.....
Borhalom.....	Sept. 21-27.....	2	.....
Csethalva.....	Oct. 4-Nov. 1.....	4	1	
Felsőverecské.....	Sept. 7-Nov. 1.....	8	.....
Harsfalva.....	Sept. 7-27.....	2	.....
Kanora.....	Sept. 14-20.....	4	.....
Kissana.....	Sept. 21-27.....	7	.....
Kisselyva.....	Sept. 7-13.....	2	.....
Munkacs.....	.....do.....	1	.....
Nagylucca.....	Sept. 21-28.....	1	.....
Odavidhaza.....	Sept. 7-13.....	3	.....
Orosztelek.....	Sept. 7-28.....	4	.....
Proszueg.....	Sept. 14-20.....	3	.....
Rakocziszallas.....	Sept. 14-28.....	9	.....
Szarvoskut.....	Sept. 21-28.....	4	.....
Szentomiklos.....	Sept. 14-28.....	13	.....
Szolyva.....	Sept. 21-Nov. 1.....	8	2	
Tarpa.....	Sept. 21-Oct. 4.....	4	.....
Ujdavidhaza.....	Sept. 14-28.....	5	.....
Varkulesa.....	Sept. 7-Oct. 11.....	5	.....
Varpalanka.....	Sept. 21-28.....	3	.....
Vezerszallas.....	.....do.....	1	.....
Volosca.....	Sept. 7-Oct. 4.....	2	.....
Zajago.....	Sept. 7-13.....	1	.....
Zsilib.....	Sept. 21-Oct. 11.....	6	.....
Zugo.....	Sept. 7-Oct. 25.....	12	1	
Bihar—				
Ermibahalyfalva.....	Oct. 12-25.....	1	.....
Borsod—				
Alorsolca.....	Oct. 12-Nov. 1.....	5	1	
Sajolad.....	Sept. 28-Oct. 18.....	22	1	
Budapest—				
Budapest.....	Sept. 13-Oct. 25.....	16	4	
Csongrad—				
Csongrad.....	Oct. 19-25.....	1	.....
Estergom—				
Labatlan.....	Oct. 19-Nov. 1.....	3	1	
Muzsla.....	Oct. 26-Nov. 1.....	1	.....
Fejer—				
Adony.....	Oct. 4.....	1	.....
Pazmand.....	Sept. 21-28.....	1	.....
Gyor—				
Raro.....	Oct. 12-18.....	1	.....
Heves—				
Ludas.....	Oct. 5-11.....	1	.....
Poroszló.....	.....do.....	1	.....
Hunyad—				
Babiona.....	Nov. 19-25.....	1	.....
Jasz-Nagykun-Szolnok—				
Szolnok.....	Oct. 12-Nov. 8.....	3	2	
Tisabo.....	Oct. 19-Nov. 1.....	4	2	
Tisabura.....	Oct. 12-Nov. 4.....	7	5	
Tiszaroff.....	Oct. 5-Nov. 1.....	6	4	
Kolozs—				
Kolozsvar, Klausenburg.....	Sept. 21-Oct. 11.....	17	.....
Komorn.....	Sept. 29-Oct. 4.....	1	.....
Mezőszopor.....	Oct. 4.....	2	.....
Pancsova.....	Sept. 29-Oct. 4.....	1	.....
Szony.....	Oct. 19-25.....	1	.....
Tardos.....	.....do.....	1	.....
Kraso-Soreny—				
Bozovics.....	Sept. 14-Oct. 11.....	6	.....
Dalbosfalva.....	Oct. 5-11.....	5	.....
Illyed.....	Sept. 21-Nov. 1.....	13	4	
Jam.....	Sept. 21-Oct. 4.....	7	.....
Nagylaposnok.....	Sept. 14-Nov. 1.....	28	4	
Neramezo.....	Sept. 21-Oct. 25.....	9	4	
Neramegyoros.....	Sept. 7-Oct. 18.....	20	2	
Stajerlak-anina.....	Sept. 21-28.....	1	.....
Szakalar.....	Sept. 14-Oct. 4.....	21	.....
Szaszka.....	Oct. 1-25.....	1	.....

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Hungary—Continued.				
Marmaros—				
Felsövico.....	Oct. 26-Nov. 1....	1	1	
Pest-Pilis—				
Budaölk.....	Oct. 25-Nov. 1....	1	1	
Erszékfalva.....	Sept. 21-23.....	1		
Faljas.....	Oct. 5-11.....	1		
Hédegkut.....	Sept. 21-23.....	2		
Ordas.....	Nov. 19-25.....	1	1	
Rákéve.....	Sept. 21-23.....	3		
Tókol.....	do.....	1		
Pozenoy, Pressburg—				
Kisnagyar.....	Oct. 5-11.....	1		
Szatmar—				
Tiszabecs.....	Oct. 4.....	3		
Temes—				
Deliblat.....	Sept. 1-Oct. 25....	35	5	
Galya.....	Oct. 12-18.....	4	1	
Gerebenes.....	Oct. 12-25.....	10	6	
Homokos.....	Oct. 4-25.....	4	1	
Karásjézeno.....	Oct. 12-18.....	2	2	
Kevevera.....	Aug. 16-Sept. 20...	8	3	
Palank.....	Aug. 10-Oct. 4.....	16	1	
Temesváralja.....	Oct. 5-11.....	7		
Varázsliget.....	Nov. 2-8.....	1	1	
Tolona—				
Tolona.....	Oct. 12-18.....	1	1	
Torontal—				
Aracs.....	Oct. 19-Nov. 1....	1	1	
Bánlak.....	Oct. 19-25.....	1	1	
Csenta.....	Oct. 11.....	6		
Csoka.....	Nov. 2-8.....	2	1	
Kuman.....	Sept. 14-28.....	8		
Melenze.....	Sept. 14-20.....	2		
Nagybecskerek.....	Sept. 21-28.....	1		
Tissaszentmiklos...	Nov. 2-8.....	3	1	
Torontalsziget.....	do.....	2	2	
Ung—				
Casp.....	Sept. 14-Oct. 4....	6		
Alsóchunkocs.....	Oct. 26-Nov. 1....	1	1	
Drégethaza.....	Oct. 12-18.....	1		
Harpas.....	Oct. 19-Nov. 1....		1	
Kisteglas.....	Sept. 21-28.....	1		
Lehocz.....	do.....	1		
Nagyrat.....	Sept. 21-28.....	3		
Palocs Ujvaros.....	Oct. 5-11.....	1		
Szobanes.....	Oct. 19-25.....	1		
Titel.....	Sept. 17-27.....	1		
Unglovasad.....	Oct. 5-25.....	10	5	
Ungvar.....	Oct. 19-25.....	1		
Ujvidek—				
Neusatz.....	Oct. 12-18.....	1	1	
Zala—				
Nagykanizsa.....	Oct. 11.....	6		
Radvanc.....	Sept. 14-20.....	1		
Zemplén—				
Kesznyéten.....	Oct. 12-18.....	1	1	
Satoraljanjhely.....	Sept. 21-28.....	1		
Tokaj.....	Oct. 19-Nov. 8.....	2	1	
Töketerbas.....	Oct. 12-Nov. 1....	1		
Bulgaria.				
Rustchuk.....	Sept. 8.....	18	8	
Sistovo.....	do.....	60		
Timovo.....	do.....	14	14	
Varna.....	Oct. 14-Nov. 14...	73	23	
Ceylon:				
Colombo.....	Sept. 30-Nov. 8...	53	46	
China:				
Amoy.....	Aug. 23.....			
Canton.....	July 13-26.....	132	6	
Chuan Chow.....	Sept. 6.....			
Foochow.....	Sept. 13.....			
Hongkong.....	Aug. 3-Nov. 1....	94	43	
Swatow.....	Aug. 1-31.....	31	30	
				Total, Aug. 25-Oct. 27: Cases, 10,987; deaths, 3,577.
				Aug. 25, 3 deaths among returning soldiers.
				Aug. 17, 1 fatal case.
				Present in vicinity; Oct. 4, present.
				Present.
				Do.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued

Reports Received from to June 28 Dec. 26, 1913—Continued.

CHOLERA—Continued

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Borneo.....				Total, May 12-June 7: Cases, 181 deaths, 105.
Sesajap, district.....	May 12-June 7....	57	40	
Java—				
Batavia and Tanjong- Priok.....	May 18-Nov. 8....	623	502	May 25-Oct. 18: 14 cases and 1 death among Europeans.
Madloen, Province.....	Apr. 22-23.....	1	4	
Pamanoekan.....	To Oct. 4.....	34	27	
Pekalongan.....	Aug. 10-Sept. 20..	110	76	
Preanger.....	Aug. 9-15.....	41	23	
Samarang.....	July 12-Aug. 16....	18	11	
Surabaya.....	Aug. 2-23.....	2		
Sibiru.....	Mar. 24-Apr. 27....	117	104	
Sumatra—				
Djambi, Province.....	June 1-Oct. 25....	325	156	July 15-Aug. 17 not received.
Padang.....	Sept. 11-20.....	5	4	
Palembang.....	June 22-Oct. 18....	278	165	
Greece:				
Athens.....	Sept. 15-29.....	1	1	
Piræus.....	Sept. 13-Oct. 13...	9	5	Among troops at quarantine.
India.....				Total, Jan. 1-July 31: Deaths, 118,004.
Bassein.....	May 4-July 19....	31	23	Sept. 27, 1 case.
Bombay.....	May 25-Nov. 1....	55	38	
Calcutta.....	Apr. 27-Nov. 8....		606	
Madras.....	June 15-Oct. 18....	17	10	
Moulmine.....	May 4-June 14....	6	6	
Negapatam.....	Sept. 14-Oct. 18....		35	
Rangoon.....	May 1-Oct. 11....	9	5	
Indo-China.....				Total, Jan. 1-Sept. 10: Cases, 213; deaths, Jan. 1-July 10, 145.
Saigon.....	June 17-23.....	2	2	
Japan.....				Total, Jan. 1-Aug. 31: Cases, 78; deaths, 22. Aug. 1-31, 2 cases.
Kobe.....	Sept. 5-8.....	7		From s. s. Canada Maru. Crew quarantined at Wada.
Nagasaki.....	Aug. 25-31.....	2		From s. s. Canada Maru.
Philippine Islands.....				Oct. 19-25: Present in Bacoor, Cavite Province, and in Paranaque, San Felipe Nery, and Pasig, Rizal Province.
Manila.....	Aug. 25-Nov. 8....	110	76	
Cavite.....	Oct. 5.....	1		Sept. 28-Oct. 4: 1 fatal case on s. s. Cebu.
Mecanayan.....	Oct. 5-11.....	1		
Novaliches.....	Oct. 15-18.....	3	3	
Polo.....	Sept. 28-Oct. 4....	1		In Bulacan.
Roumania.....				Aug. 1-Nov. 17: Total cases, 5,680; deaths, 2,926.
Annem.....	Aug. 30-Sept. 16..	47	27	
Annexed territory.....	Sept. 25-Oct. 23...	70	64	
Arges.....	Aug. 22-Oct. 15....	59	17	
Bacau.....	Aug. 30-Sept. 5....	3	2	
Bralla.....	Aug. 30-Oct. 23....	265	139	
Bucharest.....	Aug. 5-14.....	1	1	
Buzau.....	Aug. 30-Oct. 15....	79	40	
Constanta.....	Aug. 30-Oct. 23....	114	102	
Covurlui.....	Aug. 30-Oct. 15....	21	15	
Dambovit.....	Aug. 22-Oct. 15....	22	16	
Dolj.....	Aug. 13-Oct. 15....	1,428	652	
Falcin.....	Sept. 6-12.....	1	1	
Galatz.....	Aug. 22-Sept. 2....	34	6	
Gorj.....	Sept. 6-Oct. 15....	23	18	
Gostavatu.....	Aug. 13.....	1		
Ilfov.....	Aug. 22-Oct. 15....	83	38	
Kustenje.....	Sept. 3-12.....	8	1	
Jalomita.....	Aug. 22-Oct. 15....	440	183	
Mehedinti.....	Aug. 30-Oct. 15....	125	76	
Muscel.....	Sept. 17-Oct. 1....	1	1	
Olt.....	Aug. 22-Oct. 23....	270	81	
Parvail.....	Aug. 13.....	1	1	
Prahova.....	Sept. 6-Oct. 1....	30	22	
Punta.....	Aug. 22-Oct. 15....	20	5	
Rabunesti.....	Aug. 13.....	3		
Roman.....	Sept. 6-12.....		1	
Romanati.....	Aug. 22-Oct. 23....	934	600	
R. Sarat.....	Aug. 22-Oct. 15....	89	38	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Dec. 26, 1913—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Roumania—Continued.				
Silistria.....	Aug. 1.....	26	7	
Stephanesti.....	Aug. 1-14.....	18		
Sulina.....	Aug. 1-24.....	56		
Tecuci.....	Aug. 30-Oct. 1.....	13	10	
Teleorman.....	Aug. 22-Oct. 23.....	652	231	
Totlajec.....	Aug. 13.....	1		
Tulcea.....	Aug. 22-Oct. 23.....	22	17	
Turnu-Magurele.....	Aug. 5.....	1	1	
Tutova.....	Aug. 30-Oct. 9.....	14	4	
Valcea.....	Aug. 22-Oct. 23.....	81	38	
Viasora-Teleorman.....	Aug. 5.....	3		
Visina.....	Aug. 13.....	2		
Vlasca.....	Aug. 22-Oct. 23.....	430	252	
Russia:				
Governments—				
Bessarabia—				
Akkerman.....	Sept. 16-18.....	11	4	
Ishmall.....	Sept. 16-Nov. 1.....	32	12	
Kishinef.....	Sept. 22.....	3	1	
Reni.....	Oct. 5-18.....	1		
Wolfknechty.....	Sept. 18-21.....	1	1	
Ekaterinslav—				
Ekaterinslav, district.....	Oct. 5-Nov. 1.....	6		
Nicopol.....	Sept. 22-Oct. 11.....	6		
Kherson—				
Elizabethgrade.....	Sept. 28-Oct. 4.....	1	1	
Kherson, district.....	Aug. 26-Nov. 1.....	59	37	
Kherson.....	Aug. 26-Oct. 19.....	54	14	
Odesa, district.....	Sept. 7-Oct. 26.....	41	17	
Odesa.....	do.....	7	5	
Varvaroka.....	Sept. 22.....			Present.
Kief—				
Zvenigorode.....	Sept. 8.....	2	2	
Minsk.....	Sept. 14-22.....	1	1	
Poltava.....	Sept. 18-Oct. 4.....	25	5	
Taurida—				
Alechki.....	Sept. 8-Oct. 4.....	5	1	
Dnepel district.....	Sept. 21-Nov. 1.....	8	6	
Dneprovski.....	Sept. 8-14.....	8	2	
Servia.....				
Districts—				
Belgrade.....	July 4-Oct. 25.....	149	61	
Belgrade.....	do.....	345	121	
Krasna.....	Aug. 3-Nov. 2.....	271	105	
Kragujevatz.....	July 4-Oct. 25.....	313	100	
Krajina.....	Sept. 28-Oct. 13.....	34	20	
Kroushevatz.....	July 4-Oct. 25.....	250	88	
Lajkovac.....	Aug. 1-7.....	1		
Morava.....	July 4-Oct. 25.....	641	54	
Niche.....	July 4-Nov. 2.....	410	145	
Onjitze.....	July 22-Sept. 27.....	30	20	
Palanka.....	Aug. 1-7.....	1		
Prot.....	July 4-Nov. 9.....	747	270	
Podrigna.....	do.....	167	67	
Pojarevatz.....	Aug. 3-Nov. 9.....	603	298	
Pozenga.....	July 25-31.....	1		
Roudnik.....	Aug. 3-Oct. 25.....	45	22	
Shabatz.....	Aug. 1-7.....	1		
Smederevo.....	July 4-Oct. 18.....	215	81	
Tchatchak.....	July 22-Nov. 2.....	51	11	
Timok.....	July 19-Oct. 18.....	296	147	
Toplitza.....	July 22-Oct. 18.....	75	21	
Usakub.....	July 19-Aug. 2.....	37	19	
Usica.....	Sept. 28-Oct. 18.....	3	2	
Visnjica and Mirjevo.....	July 4-21.....		1	
Waljevo.....	July 22-Nov. 2.....	288	203	
Wagne.....	July 22-Oct. 25.....	389	203	
Siam:				
Bangkok.....	Mar. 23-Nov. 1.....		27	
Straits Settlements:				
Singapore.....	July 6-Nov. 1.....	49	41	
Turkey in Asia:				
Derindje.....	Oct. 11.....			Present among troops.
Smyrna.....	July 29-Oct. 12.....	293	179	Aug. 9, 1 case on s. s. Carlsbad.
Trebizond.....	Oct. 29.....			Present among troops.

Total, July 4-Nov. 9: Cases, 4,792, deaths, 1,928.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Europe:				
Constantinople.....	Aug. 2-Nov. 23...	74	40	
Dardanelles—				
Boulair.....				Oct. 28, present.
Gallipoli.....	Sept. 17-Oct. 23....			Present.
Maidos.....	Sept. 8.....		3	
Kalemi.....	Oct. 12.....	2		Isle of Marmora.
Kavak.....	Aug. 8-22.....	98	50	Sept. 30, still present.
Rodosto.....	Sept. 17-Oct. 5....	12	8	
Saloniki (Macedonia)...				July 19-Aug. 8, epidemic.
Saloniki.....	July 7-Nov. 15....	511	459	Among civilians. July 10, present in Kavala, Drama, Orfana, Serres, and Stroumitza.
Silviri.....	Oct. 15-27.....	4	4	

YELLOW FEVER.

Brazil:				
Bahia.....	May 11-Nov. 15....	50	25	
Ceara.....	Oct. 1-31.....		1	
Manaos.....	June 30-July 5....	6	6	
Pernambuco.....	May 1-June 30....		3	Oct. 16-31, 1 case.
Rio de Janeiro.....	May 25-Oct. 18....	4	5	Sept. 13—1 fatal case on s. s. Canova from Bahia. Oct. 30, 1 death.
British East Africa:				
Kisumu.....	Sept. 12-Oct. 13....	2	2	
Mombasa.....	do.....	25	24	
Nairobi.....	do.....	1	1	
Colombia:				
Cartagena.....	Aug. 23.....	1		Contracted in interior.
Cuba:				
Habana.....	July 16.....			1 case on s. s. Hydra, which left Manaos June 17, Para June 21. Four deaths occurred in voyage; 2 at Manaos, 1 at Guantánamo, and 1 at Cienfuegos.
Do.....	Aug. 8-14.....	1		From steamship Morro Castle, passenger from Campeche.
Ecuador:				
Babahoyo.....	June 1-July 31....	2	2	
Bucay.....	June 1-Aug. 31....	3	2	
Duran.....	May 1-31.....	1		
Guayaquil.....	May 1-Oct. 31....	36	21	
Milagro.....	do.....	22	11	
Naranjito.....	do.....	13	10	
Mexico.				
Campeche.....	May 25-Oct. 18....	26	11	
Carmen.....	Oct. 11.....			Present.
Maxcanu.....	Aug. 23-Sept. 6....	2	2	Case, Aug. 23, from Campeche.
Merida.....	Nov. 16.....		1	From Campeche.
Puerto Mexico, V. C.....	Nov. 17.....	2		
Southern Nigeria:				
Forcados.....	Oct. 31.....	1		
Lagos.....	May 12.....	1		July 23-Aug. 22: Epidemic; Oct. 15, still present.
Worri.....	June 1-30.....			Present.
Trinidad:				
Brighton.....	Dec. 9.....	3		
Venezuela:				
Caracas.....	Feb. 1-28.....	1		
Do.....	May 1-31.....	1		From Valencia.
Do.....	July 1-31.....	1	1	
Do.....	Oct. 1-31.....	1		Do.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to Dec. 26, 1913—Continued.

PLAGUE.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	June 3-25.....	8	4	Total, Apr. 9-June 25: Cases, 81; deaths, 59.
Debal.....				Aug. 31, free; reported, p. 656, Pt. I.
Argentina.....				Nov. 6, outbreak, with 25 deaths in 4 localities west from Rosario.
Austria-Hungary:				
Trieste.....	Nov. 1-8.....			1 fatal case on a post steamer from Buenos Aires.
Brazil:				
Bahia.....	May 11-Nov. 22.....	143	74	
Rio de Janeiro.....	July 27-Oct. 11.....	2	3	
British East Africa.....	May 15-June 12.....			1 death.
Kisumu.....	May 15-Sept. 1.....	6	1	
Mombasa.....	May 1-Sept. 11.....	89	73	Apr. 25-30, 15 deaths.
Nairobi.....	May 15-Sept. 11.....	9	5	
Cephalonia Island.....	Oct. 4.....			Present.
Chile:				
Iquique.....	May 11-Nov. 8.....	49	20	
China.....				May 18-June 14; still present in Am-po, Chaoyang, Fungshun, Kityang, Fuming, Ta-bu, and other points along the railway.
Amoy.....	Apr. 1-Aug. 25.....		409	May 25-June 7, 10 to 20 deaths daily; Sept. 22, free.
Kulangsu.....	Jan. 1-May 24.....		29	June 7, 1 or 2 deaths daily.
Canton.....				Apr. 1-July 31: Deaths, 276. Apr. 10-May 22, 300 fatal cases in the Sunninger district.
Hongkong.....	May 18-Nov. 1.....	305	258	
Kaochow.....	Apr. 10-May 22.....			10 deaths daily.
Macao.....	July 3.....			Present Aug. 7, 1913.
Nanking.....	Oct. 25.....			Present.
Shanghai.....	June 1-15.....	8	7	Among natives.
Swatow.....	July 12.....			Decreasing along the Swatow Chaochowfu Railway.
Dutch East Indies:				
Java—				
Districts—				
Kediri.....	Apr. 1-Oct. 31.....	1,922	1,682	
Madjoen.....	do.....	743	664	
Malang.....	do.....	4,337	4,141	
Surabaya.....	do.....	237	229	
Madura—				
Bangkalan.....	July 13-Aug. 9.....	34	27	And district, Nov. 6, 112 cases.
Ecuador:				
Guayaquil.....	May 1-Oct. 31.....	202	61	
Milagro.....	May 1-July 31.....	1	1	
Yaguachi.....	Oct. 1-31.....	4	1	
Egypt.....				Total, Jan. 1-Nov. 26: Cases, 649; deaths, 303.
Alexandria.....	May 28-Oct. 28.....	32	16	
Port Said.....	June 2-Oct. 15.....	17	10	
Provinces—				
Assiout.....	Oct. 10-Nov. 17.....	4	4	
Behera.....	June 13-Oct. 2.....	15	7	
Fayoum.....	May 30-Oct. 11.....	46	19	
Galloubeh.....	May 21-Sept. 12.....	7	2	
Garbieh.....	May 27-Nov. 26.....	73	23	Jan. 1-May 26: Cases, 12; deaths, 5.
Girgeh.....	Oct. 1.....	1	1	
Gizeh.....	May 29-July 1.....	6	1	
Menouf.....	May 28-Nov. 4.....	6	5	Jan. 1-May 26: Cases, 51; deaths, 24.
Minieh.....	May 30-Sept. 7.....	29	10	
German East Africa:				
Districts—				
Usmawo—				
Misungi.....	Mar. 15-May 10.....			Present.
Nora.....	do.....			Do.
Urma.....	do.....			Do.
Muanza.....	Mar. 15-June 11.....	503	459	Aug. 24, fatal case from s. a. Sybil.
Greece:				
Athens.....	Aug. 29.....	1		
Piræus.....	Aug. 21-Sept. 3.....	8	2	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	May 18-Oct. 12....	711	604	
Calcutta.....	Apr. 27-Sept. 27....		302	
Karachi.....	May 18-Nov. 1.....	202	171	
Rangoon.....	May 1-Oct. 25.....	401	379	
Provinces.....				Total, May 4-Oct. 18: Cases, 40,013; deaths, 31,435.
Delhi.....	May 4-Aug. 2.....	24	18	
Bombay.....	May 4-Oct. 18.....	14,553	10,289	
Madras.....	do.....	901	774	
Bengal.....	do.....	316	324	
Bihar and Orissa.....	do.....	1,927	1,539	
United Provinces.....	do.....	10,349	8,824	
Punjab.....	do.....	7,239	5,782	
Burma.....	do.....	1,456	1,364	
Coorg.....	June 22-Aug. 30....	10	8	
Central Provinces.....	May 4-Oct. 18.....	7	4	
Mysore.....	do.....	2,307	1,570	
Hyderabad.....	do.....	695	562	
Central India.....	do.....	43	31	
Rajputana.....	do.....	264	223	
Kashmir.....	May 4-Aug. 2.....	65	44	
North West Province.....	May 4-Oct. 18.....	88	80	
Indo-China.....				Total, Jan. 1-Sept. 10; Cases, 2,745; Jan. 1-July 10: Deaths, 2,547.
Saigon.....	June 17-Nov. 10....	78	53	
Japan:				
Kobe.....	Nov. 2-23.....	4	4	
Taiwan—				
Kagi.....	June 1-July 19....	81	63	
Yokohama.....	Sept. 19-Nov. 12....	19	1	
Mauritius.....	Apr. 18-Sept. 18....	68	46	Total, Jan. 1-Oct. 25: Cases, 108; deaths, 74. Oct. 25, 5 fatal cases, pneumonic.
Do.....	Sept. 26-Oct. 25....	87	60	
Morocco:				
Casablanca.....	Oct. 2.....	1		
Rabat.....	Oct. 19-25.....	3		
Persia.....				June 5, in Kermanschah Province, 150 cases, at Caravadeh, Harounabad, and Loud. June 11, present in vicinity of Abassa-bad.
Djame-Chouran.....	May 31-Sept. 13....	37	21	
Faizabad.....	June 11.....		3	
Gommi.....	do.....		11	
Harounabad.....	May 20-June 25....	71	51	
Larzangueneh.....	May 27-June 15....	30	28	
Mahi-Dacht.....	June 4.....	2	2	
Taybat.....	June 11.....		3	
Zebryi.....	May 31-June 25....	14	10	
Peru:				
Departments—				
Ancachs—				
Chimbote.....	July 28-Sept. 7....	2		
Arequipa—				
Mollendo.....	Apr. 28-Oct. 12....	16	2	
Callao.....	June 30-Sept. 21....	6		
Caxamarca—				
Cutervo.....	June 9-Aug. 17....	5		
Chota.....	June 30-July 27....			Present.
Libertad—				
Chiclayo.....	Apr. 28-June 8.....	1	1	
Salaverry.....	June 4-Aug. 17....	3	1	
San Pedro.....	June 4-Oct. 12....	9	2	
Trujillo.....	May 19-Oct. 12....	13		
Lima.....	do.....	24		
Monsefu.....	Oct. 6-12.....	12		
Piura.....	June 30-July 27....			Present.
Catacaos.....	Sept. 2-Oct. 6.....	2		
Piura.....	do.....	1		
Philippine Islands:				
Manila.....	May 11-24.....	3		Fourth quarter, 1912: Cases, 39; deaths, 33. First quarter, 1913: Cases, 8; deaths, 7. Second quarter: Cases, 9; deaths, 7.
Do.....	Sept. 21-27.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Astrakhan.....				Aug. 2, 2 fatal cases.
Tsarev.....	June 3-10.....		9	Pneumonic form.
Acheozek.....	Aug. 22.....	1	1	
Diamantai-Toubek.....	July 15-Aug. 17....	6	6	
Breslavsk.....	Oct. 3-19.....	5	5	Pneumonic.
Gromoslavsk.....	....do.....	11	7	Do.
Kalatch.....	....do.....	5	4	Do.
Novopetrovsk.....	Sept. 26-Oct. 21....	35	35	
Ralatch Estate.....	Sept. 28-Oct. 16....	4	4	
Voisko-Donsky.....	Oct. 19-21.....	31	28	
West Turkestan— Semiretchji territory— Prjevalsk district ..	Sept. 25.....	26	26	Among the Tourguen.
Siam:				
Bangkok.....	Mar. 23-Nov. 1....		21	
Korat.....	Mar. 21-31.....			Epidemic.
Straits Settlements:				
Singapore.....	June 15-21.....	1	1	
Tripoli:				
Derna.....	July 15.....			Present.
Tripoli.....	July 1-Sept. 30....	56	19	
Turkey in Asia:				
Adalia.....	Aug. 30.....	1		
Basra.....	July 14-21.....	1	1	To June 3, 31 cases.
Beirut.....	Nov. 26.....	1		
Trebizond.....	Sept. 29-Oct. 4....	11	2	In the prison.
Uruguay:				
Montevideo.....				July 28, present.

SMALLPOX.

Algeria:				
Departments—				
Algiers.....	May 1-July 31.....	11		
Constantine.....	Apr. 1-July 31.....	27		
Oran.....	May 1-July 31.....	59		
Arabia:				
Aden.....	June 3-9.....	1		
Do.....	Oct. 6-Nov. 24....	12	3	
Argentina:				
Buenos Aires.....	Apr. 1-July 31.....		11	
Australia:				
New South Wales.....				Total July 1-Oct. 24: Cases, 953.
Albury.....	Sept. 12-26.....	1		Sydney district, 929 cases.
Bourke.....	Oct. 1-24.....	1		
Coolah.....	Sept. 12-Oct. 24....	4		
Cootamundra.....	Aug. 7-Sept. 26....	1		
Goulburn.....	July 1-31.....	1		
Grafton.....	Oct. 1-24.....	1		
Illabo.....	Aug. 7-Sept. 11....	1		
Hardon.....	....do.....	1		
Lithgow.....	July 1-31.....	1		
Liverpool.....	Aug. 7-Sept. 11....	2		
Newcastle.....	July 1-31.....	1		
Nrygan.....	....do.....	1		
Parkes.....	....do.....	5		
Penrith.....	....do.....	2		
Sydney.....	July 1-Sept. 11....	721		Oct. 31, still present.
Taree.....	July 1-31.....	2		
Ulmarras.....	....do.....	2		
Wellington.....	Sept. 12-26.....	1		
Queensland—				
Brisbane.....	Aug. 7-Sept. 11....	1		
Ipswich.....	July 1-Sept. 11....	4		
Toowoomba.....	July 1-31.....	1		
South Australia.....	July 17-Aug. 2....	1		
Victoria—				
Melbourne.....	July 14.....			1 case on s. s. Karoola from Sydney.
Austria-Hungary:				
Capodistria.....	Oct. 5-11.....	2		
Coastland.....	July 6-12.....	1		
Decani.....	Oct. 5-11.....	2		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 28 to Dec. 26, 1913—Continued****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Flume.....	May 27-July 7....	19	1	
Gallcia.....	July 6-Aug. 12....	1		
Gorz and Gradinska.....	Aug. 7-14.....	1		
Krain.....	do.....	1		
Trieste.....	June 1-Nov. 1....	45	1	Case June 14 from Patras.
Tyrol and Vorarlberg.....	Aug. 10-Oct. 25..	15		
Belgium:				
Antwerp.....	July 1-7.....	1		
Brazil:				
Bahia.....	May 11-Nov. 22..	19	1	
Manaos.....	June 15-21.....	1		
Para.....	June 15-Nov. 29..	86	47	
Pernambuco.....	May 1-Oct. 31....		298	
Rio de Janeiro.....	May 4-Nov. 8....	224	41	
British East Africa:				
Mombasa.....	Mar. 1-June 30...	29	9	
Canada:				
Provinces—				
British Columbia—				
Vancouver.....	June 8-Sept. 13...	2		
Manitoba—				
Winnipeg.....	June 15-Oct. 18..	20		
Nova Scotia—				
Sydney.....	July 14-Aug. 2....	2		Case July 14 from s. s. Hartlepool from Marseille.
Ontario—				
Hamilton.....	Oct. 1-31.....	3		
Fort William.....	June 10-30.....	4		
Niagara Falls.....	Nov. 8-21.....	2		
Ottawa.....	June 8-Dec. 6....	27		
Toronto.....	June 16-Aug. 2....	9		
Quebec—				
Grosse Isle Quarantine.....	June 20.....	1	1	In steerage.
Quebec.....	June 8-Sept. 20...	6		
Montreal.....	July 6-Dec. 6....	86	2	
St. Johns.....	May 25-July 5....	4		
Chile:				
Iquique.....	June 1-21.....	2		
Santiago.....	June 15-29.....			Present. Aug. 16-Sept. 13, epidemic.
Valparaiso.....	July 12.....			Present.
China:				
Amoy.....	May 25-June 7....			Do.
Chungking.....	Aug. 2.....			Do.
Dalny.....	July 27-Oct. 20...	2	1	
Hankow.....	Oct. 26-Nov. 1....	2		
Holhow.....				Aug. 22, free.
Hongkong.....	May 18-June 14...	9	7	Nov. 1, 1 case.
Kulangsu.....	May 25-31.....			Present.
Nanking.....	May 11-Sept. 27..			
Shanghai.....	May 19-Oct. 28...	9	49	Deaths among natives.
Tientsin.....	June 8-14.....		1	
Dutch East Indies.				
Java—				
Batavia.....	June 22-Nov. 8....	42	16	
Klatten.....	Sept. 8-29.....	78	3	
Patjittan.....	do.....	15	7	
Samarang.....	do.....	637	78	
Soerakarta.....	Aug. 15.....	517	39	
Surabaya.....	May 11-Oct. 11...	16	5	
Egypt:				
Alexandria.....	May 28-Nov. 18...	27	21	
Cairo.....	May 14-Nov. 11...	48	17	
Port Said.....	Oct. 15-Nov. 11...	11	3	
France:				
Limoges.....	Sept. 1-30.....		21	
Lyon.....	June 23-29.....		1	
Marseille.....	May 1-Oct. 31....		142	
Nantes.....	Aug. 3-Nov. 1....	2		
Paris.....	Mar 25-Nov. 1....	28		
St. Etienne.....	Sept. 21-Nov. 15..	12	2	
Toulon.....	Aug. 18.....	1		
Germany:				
Berlin.....	Aug. 24-30.....	1		Total June 8-Oct. 4: Cases, 7.
Kehl.....	June 1-July 31....	2	1	
Strassburg.....	Aug. 1-31.....	1		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 23 to Dec. 26, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Hull.....	Sept. 14-20.....	1	—	
Liverpool.....	May 25-Oct. 18.....	6	1	
Manchester.....	July 20-26.....	1	—	
Greece:				
Patras.....	June 9-Aug. 31.....	—	9	
India:				
Bombay.....	May 26-Nov. 8.....	78	63	
Calcutta.....	Sept. 13-27.....	—	2	
Karachi.....	May 25-Aug. 16.....	13	4	
Madras.....	May 24-Oct. 4.....	31	13	
Moulmine.....	Mar. 30-June 23.....	5	5	
Do.....	Aug. 3-9.....	1	1	
Rangoon.....	May 1-Sept. 30.....	51	20	
Indo-China:				
Saigon.....	July 8-14.....	1	1	
Italy:				
Naples.....	Aug. 2-15.....	3	—	
Rome.....	Jan. 5-11.....	1	1	
Japan.....				Total Jan. 1-July 31: Cases, 87 deaths, 29.
Hokkaido.....	Apr. 1-30.....	1	—	
Kanagawa ken.....	May 1-31.....	1	—	
Kobe.....	June 23-29.....	1	—	
Nagasaki ken.....	May 1-July 31.....	54	14	
Otta ken.....	May 1-June 30.....	11	4	
Tokyo.....	June 18-Aug. 31.....	18	11	
Yokohama.....	Aug. 19-25.....	1	1	
Luxemburg:				
Esch.....	May 17-31.....	2	—	
Malta.....	Sept. 1-30.....	2	—	
Mauritius.....	Apr. 13-July 5.....	1,019	106	
Mexico:				
Acapulco.....	May 25-Aug. 16.....	—	5	
Aguascalientes.....	June 9-Nov. 23.....	—	40	
Chihuahua.....	June 23-Nov. 2.....	—	13	
Guadalajara.....	June 8-Oct. 18.....	80	—	
Hermosillo.....	June 7-Nov. 3.....	128	85	Among troops.
Manzanillo.....	July 18.....	—	—	Present.
Mexico.....	Apr. 20-Oct. 25.....	276	150	
Monterey.....	June 9-Oct. 26.....	—	8	
Oaxaca.....	Oct. 12-Nov. 17.....	—	3	
Panuco.....	Sept. 12.....	30	—	
Puerto Mexico.....	July 1-31.....	—	3	
San Luis Potosi.....	Apr. 27-Oct. 18.....	26	13	
Saltillo.....	Aug. 1-June 30.....	—	25	
Tampico.....	Sept. 16-Oct. 20.....	3	2	
Vera Cruz.....	June 16-Nov. 30.....	15	6	
Newfoundland:				
St. Johns.....	June 15-Oct. 18.....	39	—	
New Zealand:				
Auckland, district.....	May 1-Aug. 21.....	116	27	Sept. 5, still present.
Norway:				
Trondjem.....	Oct. 1-31.....	6	—	
Peru.....				Sept. 30, epidemic in Ancon, Callao, Chancay, Huaco, and Lima. Sept. 27, still present in Ancon and Huaco. In Lima Jan. 1-June 30, 235 cases were admitted to the lazaretto.
Philippine Islands.....				First quarter, 1913: Cases, 57 second quarter, cases, 63.
Portugal:				
Lisbon.....	May 25-Nov. 15.....	77	—	
Russia:				
Batoum.....	Apr. 1-May 31.....	4	—	
Lilbau.....	June 2-July 20.....	3	1	
Moscow.....	May 18-Nov. 1.....	93	27	
Odessa.....	June 8-Nov. 1.....	59	15	
Riga.....	June 22-28.....	6	—	
St. Petersburg.....	May 18-Nov. 22.....	42	6	
Siberia—				
Vladivostok.....	May 7-June 20.....	3	—	
Warsaw.....	Feb. 23-Oct. 4.....	96	42	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 23 to Dec. 26, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Samoa:				
Apia.....				May 18, 1 death on transport Michael Jepson, from Hong-kong, and to June 4, 4 cases transferred from this vessel to a lighter 3 miles east.
Servia:				
Belgrade.....	June 1-Sept. 27....	16	3	July 16, present in Dubotzi, Neresmitza, and Volui
Siam:				
Bangkok.....	Mar. 23-Aug. 9.....		11	
Spain:				
Almeira.....	June 1-Aug. 31.....		6	
Barcelona.....	June 8-Nov. 22.....		102	
Cadiz.....	May 1-Sept. 30.....		5	
Madrid.....	June 1-Oct. 31.....		216	
Malaga.....	Aug. 1-31.....		1	
Seville.....	July 1-31.....		1	
Valencia.....	June 1-Oct. 25.....	6		
Straits Settlements:				
Singapore.....	May 4-Oct. 11.....	2	1	
Switzerland:				
Cantons—				
Basel.....	June 1-Nov. 15.....	47		
Zurich.....	May 18-24.....	1		From Paris.
Turkey in Asia:				
Beirut.....	May 25-Nov. 22....	119	55	
Damascus.....	June 1-7.....			Present.
Mersina.....	May 25-July 12....	3		
Do.....	Nov. 9-29.....	3		
Smyrna.....	Apr. 26-Aug. 2.....		67	
Tarsus.....	Nov. 22.....			Do.
Turkey in Europe:				
Constantinople.....	June 1-Nov. 15.....		86	
Saloniki.....	June 2-Nov. 22.....		100	
Union of South Africa:				
Johannesburg.....	May 10-June 7....	23		
Uruguay:				
Montevideo.....	Sept. 1-30.....	38	1	
West Indies:				
Trinidad.....	Aug. 19.....	2		On s. s. Danube and placed in quarantine 5 miles distant.

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

ARKANSAS.

Births and Deaths—Registration of. (Reg. Bd. of H., May 16, 1913.)

Under authority of sections 7 to 10, inclusive, of the act of February 25, 1913, which were published in the Public Health Reports for May 30, 1913, at page 1108, the State Board of Health of Arkansas, on May 16, 1913, adopted rules governing the registration of births and deaths. The act and the rules taken together provide for the standard system of registration which has been adopted in a number of States. (North Carolina, Public Health Reports, Oct. 24, 1913, pp. 2264-2274; New York, Public Health Reports, Dec. 19, 1913, pp. 2796-2805; Tennessee, Public Health Reports, Nov. 14, 1913, pp. 2444-2452.)

The State health officer is made registrar of vital statistics, and he is given authority to appoint and remove local registrars.

The rules provide that the name of the putative father of an illegitimate child "shall not be entered [on the certificate of birth] without his consent, but the other particulars relating to the putative father may be entered if known, otherwise as 'unknown.'"

The following question is added to the certificate of birth: "Were precautions taken against ophthalmia neonatorum? If none, state the reasons therefor."

State Board of Health—Appropriation for. (Act 171, Mar. 13, 1913.)

The following appropriations are for two fiscal years, April, 1913, to March, 1915, inclusive:

Salary of the secretary, State board of health.....	\$3,600
Salary of combined bookkeeper and stenographer.....	2,000
Traveling expenses and per diem of the State board of health.....	1,000
Salary, recording clerk, bureau of vital statistics.....	2,400
Salary, second recording clerk.....	1,440
Postage.....	1,000
Expressage and parcels post.....	1,000
Incidentals, including furniture, filing cases, typewriters.....	2,000
Printing all necessary blanks, forms, bulletins, etc.....	2,500
For mailing cases, containers, culture tubes, and apparatus for gathering specimens for examination.....	500
For traveling expenses, secretary, State board of health.....	500

17,940

FLORIDA.

Communicable Diseases—Notification of Cases of. (Reg. Bd. of H., June 10, 1913.)

Rule 1 of the regulations of the State board of health, adopted February 27 and 28, 1912 (Public Health Reports, Dec. 6, 1912, p. 2031), was amended so as to include tuberculosis and typhoid fever in the list of diseases which are to be reported to the State board of health or its representative by physicians or other persons having charge of patients.

Venereal Diseases—Distribution of Literature Concerning. (Reg. Bd. of H., June 10, 1913.)

Rule 67 of the regulations of the State board of health, adopted February 27 and 28, 1912 (Public Health Reports, Dec. 6, 1912, p. 2041), was amended so as to include "venereal diseases" in the list of diseases the nature and danger of which are to be explained in literature to be distributed by local health officers and representatives of the State board of health.

Sewage—Disposal of (Act June 7, 1913.)

SECTION 1. That the term "underground waters of the State," when used in this act, shall include all underground streams and springs and underground waters within the borders of the State of Florida, whether flowing in underground channels or passing through the pores of the rocks.

SEC. 2. No municipal corporation, private corporation, person, or persons within the State shall, after the passing of this act, use any cavity, sink, driven or drilled well now in existence, or sink any new well within the corporate limits, or within 5 miles of the corporate limits, of any incorporated city or town, or within any unincorporated city, town, or village or within 5 miles thereof, for the purpose of draining any surface water or discharging any sewerage into the underground waters of the State, without first obtaining a written permit from the State board of health.

SEC. 3. Every such permit for the discharge of sewerage, or surface water, shall be revocable or subject to modification or change by the State board of health, on due notice, after an investigation and hearing, and an opportunity for all interests and persons interested therein to be heard thereon, said notice or notices being served on the person or persons owning, maintaining, or using the well, cavity, or sink, and by publication for two weeks in a newspaper published in the county in which said well, cavity, or sink is located. The length of time after the receipt of the notice within which it shall be discontinued may be stated in the permit. All such permits before becoming operative shall be filed in the office of the clerk of the circuit court for the county in which such permit has been granted.

SEC. 4. For the purpose of this act, sewerage [sic] shall be defined as any substance that contains any of the waste products or excrementitious or other discharges from the bodies of human beings or animals.

SEC. 5. Every individual, municipal corporation, private corporation, or company shall discontinue the discharge within the corporate limits, or within 5 miles of the corporate limits of any incorporated city or town, or within any unincorporated city, town, or village, or within 5 miles thereof, of sewerage or surface drainage into any of the underground waters of the State within 10 days after having been so ordered by the State board of health.

SEC. 6. Any municipal corporation, private corporation, person or persons that shall discharge sewerage or surface drainage, or permit the same to flow into the underground waters of the State, contrary to the provisions of this act, shall be deemed guilty of a misdemeanor, and shall upon conviction be punished by a fine of \$25 for each offense, and the doing of the prohibited act for each day shall constitute a separate offense, or by imprisonment not exceeding one month, or both, at the discretion of the court.

SEC. 7. All laws or parts of laws in conflict with the provisions hereof are hereby repealed.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

SANDUSKY, OHIO.

Visiting Nurse—Appointment of. (Res. Bd. of H., Oct. 8, 1912.)

That there be, and is hereby, created, with the approval and consent of the city council of Sandusky, Ohio, the office of visiting nurse. Said nurse shall be appointed for sanitary duty by the board of health, and it shall be the duty of said nurse to take such measures as shall prevent the spread of tuberculosis and other contagious diseases within the limits of the city of Sandusky, and in the performance of said duties shall be under the control and direction of the executive officer of the board and shall receive a salary of \$75 per month, payable monthly.

Tuberculosis—Reporting of Cases of. (Res. Bd. of H., June 4, 1912.)

SECTION I. That to secure the inhabitants of the city of Sandusky from the evils of contagious, malignant, and infectious diseases each physician or other person called to attend a person suffering from pulmonary tuberculosis shall at once report to the health officer of the city of Sandusky the name, age, sex, and color of the patient and the house and place in which such person may be found.

SEC. II. Any person violating any of the provisions hereof shall upon conviction be fined not less than \$10 nor more than \$100.

Foodstuffs—Protection of. (Res. Bd. of H., Apr. 2, 1912.)

SECTION 1. No person, firm, or corporation shall sell or keep or expose for sale or offer for sale in any place in the city of Sandusky, State of Ohio, any breadstuffs, cakes, crackers, pastries, cheese, butter, butterine, lard, figs, dates, dried fruit (sauerkraut, mincemeat, any other food products, unwashable fruit), or vegetables, or foodstuffs presenting moist surface on which dust or filth from any source or in any form may gather or be deposited, or which may be polluted by animals, insects, or other vermin, unless the same be contained in dust and dirt proof cases or receptacles, and shall be wrapped for delivery in clean paper covering or other dust and vermin proof receptacle.

SEC. 2. Whoever violates any of the provisions of this resolution shall be fined in any sum not exceeding \$100.

Milk and Milk Products; Permit Required for Sale of—Ice Cream, etc.; Protection of. (Res. Bd. of H., Aug. 22, 1912.)

SECTION I. That sections 1 and 8 of a certain resolution entitled "A regulation to regulate the production and sale or manufacture of milk, ice cream, meats, fruits and vegetables, and other foodstuffs," passed by the board of health on the 8th day of December, 1910, be amended so as to read as follows:

"SECTION 1. *Permits.*—No person, firm, or corporation shall engage in the sale of milk or cream in the city of Sandusky, ship the same into the city, or supply to others for use in said city unless he shall first obtain permit from the board of health so to do: *Provided*, That any person, firm, or corporation engaged in the sale of milk or cream or

the manufacture and sale of butter or cheese, or other similar products in the city of Sandusky receiving regular or frequent shipments of milk or cream from without the city from one or more shippers, may obtain a permit as herein provided to cover all such shipments upon the furnishing by such person, firm, or corporation to the health officer of a complete list of names with the addresses of such shipper or shippers: *Provided further*, That such permit shall, during the term it is in force, cover only the shipments of such person or persons whose names and addresses shall have been furnished to the health officer as herein provided. All permits shall be renewed semi-annually, all permits issued prior to June 30 to expire July 1, and all permits issued after June 30 to expire December 31 of each year. A fee of 50 cents shall be charged for each permit."

"SEC. 8. *Sale on streets*.—No person by himself or by his servant, agent or employee or any person, partnership or corporation, shall sell or offer for sale upon any of the streets of the city of Sandusky, Ohio, any ice cream, ice-cream cones, ice-cream sandwiches, or other similar products made wholly or in part of ice cream or milk or cream unless contained or delivered in the original sealed package or container or locked can or other dust or dirt proof receptacle approved by the board of health: *Provided*, That it shall further be unlawful to transfer upon said streets for the purpose of selling or offering for sale any ice cream, ice-cream cones, ice-cream sandwiches, or other similar products made wholly or in part of ice cream or milk or cream from one package, container, can, or other receptacle to another package, container, can, or other receptacle: *Provided further*, That it shall be unlawful to make or manufacture upon said streets for the purpose of selling or offering for sale any ice cream, ice-cream cones, ice-cream sandwiches, or other similar products made wholly or in part of ice cream or milk or cream."

SEC. II. That sections 1 and 8 of a resolution entitled "A resolution to regulate the production and sale or manufacture of milk, ice cream, meats, fruits, and vegetables and other foodstuffs," passed on the 8th day of December, 1910, and all resolutions or parts of resolutions inconsistent herewith be and the same are hereby repealed.

SAN FRANCISCO, CAL.

Common Towels—Prohibited in Public Places. (Ord. 1896 N. S., May 28, 1912.)

SECTION 1. That no person, firm, or corporation owning, in charge of, or in control of any lavatory or wash room in any hotel, restaurant, factory, store, office building, school, public hall, railway station, or public place or building shall maintain in or about such lavatory or wash room any towel for common use, nor shall they expose for use or allow to be exposed for use any towel to be used by more than one person, such as that now known as the roller towel. The term "common use" as used in this ordinance, shall be construed to mean for use by more than one person.

SEC. 2. Any person, firm, or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not less than \$5 nor more than \$25 or by imprisonment for not less than 5 days nor more than 25 days.

Dogs—Not to run at Large. (Ord. 1829 N. S., Mar. 20, 1912.)

SECTION 1. Every person owning or having control of any dog shall keep the same within a sufficient inclosure, and shall not suffer or permit the same to run at large on any public highway, or street, or sidewalk, or alley, or court, or place, or upon any unfenced lot or property, within the city and county of San Francisco, unless a license for the current year be first paid, as required by ordinance No. 755, and unless such dog has around its neck a collar, or around its leg a strap, having attached thereto a metallic tag or plate issued by the tax collector, having thereon the number of the

license issued for said dog and figures indicating the year for which the license tag has been paid. Every dog not kept within a sufficient inclosure or led and controlled by a line, rope, or chain shall be deemed running at large within the meaning of this ordinance.

SEC. 2. It shall be unlawful for any person to remove any license tag or plate from any dog belonging to another or to place on any dog any tag or plate for use as a license tag except it be issued by the tax collector for that particular dog.

SEC. 3. No person owning or having control of any dog shall suffer or permit the same under any circumstances to run at large in any public park or public square.

SEC. 4. It shall be unlawful for any person owning or having control of any female dog to suffer or permit the same to run at large while said dog is in season.

SEC. 5. Every dog running at large in violation of the provisions of this ordinance shall be immediately impounded in the public pound.

SEC. 6. If any dog shall bite any person or animal, within the city and county of San Francisco, and the person or animal so bitten was not at the time trespassing upon the person or property of the owner or person having control of such dog, the owner or person having control of such dog shall be deemed guilty of a misdemeanor, and upon the trial of any person charged with the violation of this section the court may order such dog to be muzzled or destroyed within 24 hours, and the chief of police shall cause such order to be executed.

SEC. 7. Every person who shall violate any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$50 or by imprisonment in the county jail for not more than 50 days, or by both such fine and imprisonment.

SEC. 8. Ordinance No. 1364, approved December 15, 1904, is hereby repealed.

Dogs—Muzzling of. (Ord. 1946 N. S., July 3, 1912.)

SECTION 1. Every dog not kept within a sufficient inclosure or led and controlled by a line, rope, or chain, or not being effectually muzzled so as to prevent such dog from biting persons or animals, is hereby declared to be a menace to public health and safety.

SEC. 2. Every person owning or having control of any dog shall effectually muzzle it so as to prevent it from biting persons or animals, provided, however, that no dog need be muzzled while kept within a sufficient inclosure or led and controlled by a line, rope, or chain. All muzzles shall be of the "basket shape" type and must be properly adjusted.

SEC. 3. Every dog not kept within a sufficient inclosure, or led and controlled by a line, rope, or chain, or not muzzled, as required by the provisions of section 2 hereof, shall be immediately impounded in the public pound by any peace officer or the poundkeeper.

SEC. 4. Every person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than \$50 or by imprisonment in the county jail for not more than 50 days, or by both such fine and imprisonment.

SEC. 5. This ordinance shall take effect July 1, 1912, and be and remain in full force and effect to and including December 31, 1912.

Communicable Diseases—Removal of Persons Suffering from. (Ord. 1987 N. S., Aug. 29, 1912.)

SECTION 1. Ordinance No. 1034, entitled "Regulations to prevent the spread of disease," approved October 27, 1903, is hereby amended by the addition of a new section, to be numbered section 15½, as follows:

SEC. 15½. It shall be unlawful for any person to remove, or cause to be removed, any person afflicted with an infectious, contagious, or pestilential disease from any

building to any other building or hospital, as provided in section 15, unless said patient is wrapped in a sterile sheet. All clothing, including bedclothes and mattresses used by the patient shall be thoroughly fumigated after patient has been removed. The interior of all ambulances or other vehicles used for the purpose of removing such patients shall be thoroughly washed with a disinfecting solution immediately following such use.

Pasteurized Milk—Definition of—Production and Sale. (Ord. 2098 N. S., Dec. 11, 1912.)

SECTION 1. Pasteurizing milk is hereby defined as follows: To be the heating of every portion of the milk to not less than 140° F., maintaining same at that temperature for at least 20 minutes, and immediately cooling the same to at least 45° F.

The use of this term shall be limited to milk produced and sold under the following conditions:

A. Any person, firm, or corporation desiring to produce pasteurized milk for sale in the city and county of San Francisco shall make application to the department of public health on blanks provided for that purpose.

B. A permit shall be granted by the department of public health if it appears upon investigation that the pasteurizing equipment installed is such that 99 per cent of all bacteria and all pathogenic bacteria are killed in the milk treated therein at a temperature of not less than 140° F. maintained at that temperature for 20 minutes. Further, that the pasteurizing apparatus is equipped with a recording thermometer of such a type that the same may be kept locked by the department of public health.

C. The thermometric record of all pasteurization of milk shall become the property of the department of public health and shall be collected by its authorized representatives.

D. Milk intended for pasteurization shall conform to the following requirements: It shall be the product of a dairy rating not less than 60 per cent on the score card, department of public health.

E. All pasteurized milk shall be plainly marked on each bottle or other container in which such milk is delivered to consumers with a label bearing the inscription "Pasteurized milk," together with a serial number.

F. All utensils used in the production and handling of pasteurized milk must be properly cleaned and sterilized each time before using, and shall be so constructed that all parts are absolutely free from places where milk can accumulate or soak in so that it can not be removed by simple washing, and the surface coming in contact with the milk or cream must be smooth and free from rust.

G. Pasteurized milk shall be delivered to the consumer not later than 24 hours after pasteurization.

H. Milk once pasteurized must not be repasteurized.

I. Any violation of the regulations for the production of pasteurized milk shall result in a revocation of the permit to produce pasteurized milk for sale in the city and county of San Francisco.

Milk and Cream—Care of When to be Sold in Quantities of One Quart or Less. (Ord. 2099 N. S., Dec. 11, 1912.)

SECTION 1. No person, firm, or corporation shall sell, offer for sale, expose for sale, or keep with the intention of selling, any milk or cream in quantities of 1 quart or less, in stores or in other places where merchandise or commodities other than milk or cream is sold, offered for sale, or exposed for sale, or kept with the intention of selling (except where the milk or cream is to be consumed upon the premises), unless the milk or cream is kept, offered for sale, exposed for sale, or sold in tightly closed bottles or receptacles of a similar character, upon the cap or covers of which

is printed or inscribed in a conspicuous and legible manner the name of the person, firm, or corporation bottling said milk or cream in such bottles or receptacles. It shall be unlawful for any such bottle or receptacle to have blown into it, or otherwise indicated thereon, the name of any person, firm, or corporation other than or different from that which is indicated on said cover or cap.

SEC. 2. No person shall transfer any milk from one can, bottle, or receptacle on any street, alley, or thoroughfare, or upon a delivery wagon or other vehicle, or in any place in the city and county of San Francisco, except in a milkhouse or creamery, the sanitary condition of which has been approved by the department of public health.

SEC. 3. Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than \$5 and not more than \$100, or by imprisonment in the county jail for not less than 24 hours and not more than 30 days, or by both such fine and imprisonment.

VALLEJO, CAL.

Manure—Transportation of. (Ord. 76 N. S., Aug. 10, 1912.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to transport or carry manure or stable refuse in any vehicle without a permit from the board of health certifying its approval of the construction of such vehicle, and specifying the manner in which such vehicle may be used.

SEC. 2. It shall be unlawful for any person to load manure or stable refuse upon any vehicle elsewhere than within the premises from which the same is to be removed, or to transport manure or stable refuse through the public streets in such manner as to permit the same to fall upon any street; or to unload or deposit manure or stable refuse from any vehicle anywhere within the city without a permit from the board of health.

SEC. 3. Any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not to exceed \$500 or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

Dairies and Milk Depots—Construction and Care of—Handling of Milk. (Ord. 75 N. S., Aug. 10, 1912.)

SECTION 1. Sheds and barns in which cows are milked shall be so constructed and of such size as to insure efficient ventilation.

SEC. 2. The walls of milking sheds and milking barns shall be provided with an average door and window space of not less than 10 square feet in every 10 lineal feet. Sheds and barns must be properly and adequately ventilated.

SEC. 3. The floor section of sheds and barns where cows are stabled or milked shall be so constructed as to absolutely prevent all seepage to the ground beneath. In said floor there shall be provided a gutter drain, so constructed as to prevent seepage and connect with a common drain or sewer pipe communicating with a street sewer where one exists. Where there is no street sewer the discharge must be carried so far from the barn and so handled as to effectually prevent contamination of the milk or the atmosphere of the dairy or barn therefrom. Cows must not be permitted to stand in or on, or to have access to, accumulations of manure and urine, or either.

SEC. 4. The floor space between the stable sections shall be so constructed that unnecessary recesses and angles are avoided. Food boxes shall be so constructed that they can be thoroughly cleaned and all the recesses between the troughs wherein dirt or refuses may lodge be so constructed that they may be thoroughly cleaned. And they shall be properly cleaned at the time of the general cleaning of the barn.

SEC. 5. Where the floor of a stable, barn, or shed in which cows are kept or milked is not more than 1 foot above the ground and said floor is not to be reconstructed, it shall be made of artificial stone, bitumen, asphalt, or cement; provided, that in case only two sides of such stable, shed, or barn rest directly upon the ground, the floor may be of wood.

SEC. 6. Food troughs and food cars must be thoroughly cleansed at least once a day. The accumulation of waste in or about food troughs, runways, and food boxes must be prevented. The walls of stables, milking barns, shall be whitewashed or limewashed at least once every six months.

SEC. 7. The houses or sheds in which milk is strained or stored shall be so constructed as to prevent any direct communication by means of doors, windows, or other apertures with the said barns or stables in which cows are kept or milked; provided, that a pipe with a funnel receptacle for receiving the milk may be inserted through the wall connecting said barn or stables with the house or shed in which said milk is strained or cooled. Said pipe and funnel to be kept clean, and when not in actual use the funnel shall be securely covered.

SEC. 8. The floor of the dairy house, shed, or barn in which milk is strained or stored shall be watertight; where such floor is to be renewed or reconstructed, it shall be made of cement, artificial stone, asphalt, or bitumen. Such flooring must have a surface drain connected with a sewer, or with a common drain in case there is no sewer outlet.

SEC. 9. The walls of dairy houses, depots, shed, and barns where milk is strained or stored shall be so constructed as to be tight and allow of easy and thorough cleaning.

SEC. 10. All windows, doors, and ventilators of dairy houses or sheds in which milk is strained or stored shall be provided with a screen of wire mesh. The screen of the windows and ventilators must be securely and permanently fastened.

SEC. 11. Immediately after the main receptacle bucket has been filled with milk, it shall be taken covered to the milk house and emptied into the strainer from a platform outside the milk house. The receptacle buckets shall be hung upon hooks or rest on a platform at least 3 feet above the floor, and must be so covered as to be protected at all times from exposure to dirt or discharges and must not be allowed to rest upon the floor of the milk shed.

SEC. 12. Milkers and other helpers not directly concerned in the straining, separating, and filling of containers, shall not be allowed within the milk house while milk is being strained or handled; nor shall any domestic animal be allowed therein.

SEC. 13. Vats or troughs used to cool milk, if of wood, shall be painted white and shall be of such depth that the water contained therein shall not rise above the shoulder of the milk can. They shall be thoroughly cleaned at least once each day and at all times shall be free from scum, slime, stagnant or impure water.

SEC. 14. The milk house shall be washed and hosed down daily with fresh water; and at least once each week the floors and drains within all milk houses and sheds shall be sprinkled with lime and gypsum.

SEC. 15. Persons handling milk within the milk houses shall be personally clean.

SEC. 16. Milk awaiting delivery shall not be kept in a room used for domestic purposes.

SEC. 17. No milk container or milk vessel that is dusty or rust eaten or otherwise unfit shall be used.

SEC. 18. No person shall drink from any vessel or utensil or the cover thereof which is used for the delivery of milk; nor shall any can, bottle, or utensil used for the purpose of delivering milk be used for any other purpose; nor shall such can or utensil be placed in, on, or about a stove or other heating apparatus.

SEC. 19. In houses where contagious disease is known to exist, no bottles, cans, or other utensils in which milk is delivered shall be collected until the houses have been fumigated and said bottles, cans, and other utensils sterilized.

SEC. 20. No person suffering from any contagious disease, or in whose place of dwelling any contagious disease is known to exist, shall be allowed upon the premises of any dairy or to deliver milk from any dairy or milk depot.

SEC. 21. Where contagious disease occurs in any dairy, the person or persons suffering therefrom shall be strictly isolated and kept in quarantine, and any person who may be in contact shall not be permitted to work in the dairy until such time as may be designated by the board of health.

SEC. 22. All persons acting as milkers shall be personally clean and free from contagious diseases.

SEC. 23. No cow shall be milked unless the sides, bellies, haunches, udders, teats, and tail of the cow shall be clean.

SEC. 24. Before handling or milking the cows, the milkers shall thoroughly wash and scrub their hands and otherwise be thoroughly clean.

SEC. 25. Milkers shall reject the first three sprays of fore milk from each teat before milking into the bucket.

SEC. 26. Colostrum milk shall be rejected, and also milk into which manure or discharges have entered while milking, or which is bloody, stringy, thick, or unnatural in appearance. Milking pails shall be thoroughly cleaned before being used.

SEC. 27. All milking stools must be kept clean.

SEC. 28. No sick cow or cows showing signs of tuberculosis, contagious abortion, mammitis, mammary abscess, disease of the udder or teats, or actinomycosis (lump-jaw) shall be allowed in the herd from which milk is drawn, and the milk of cows within 30 days of calving or 5 days after calving shall not be mixed with that of the herd or marketed.

SEC. 29. In dairies and milk depots, all cans, bottles, and other utensils after being used shall be thoroughly washed in a water containing lye or sodium carbonate (sal soda) or some substance containing a mixture of these, with or without soap.

SEC. 30. No more than 20 cans or 50 bottles shall be washed in a tank or tub containing less than 10 gallons of water unless said tank or tub is filled with a fresh solution, as provided in section 29 of this ordinance.

SEC. 31. All cans, bottles, and other utensils shall be thoroughly rinsed after being washed, as provided in section 30 of this ordinance, in a tank or tub of clean, fresh water. The rinsing tank or tub, while in use, must have a constant inflow and outflow of pure, clean, fresh water. After being rinsed all cans, bottles, and other milking utensils shall be subjected to the action of boiling water in a closed vat or to the action of steam. After being so subjected to boiling water or steam said cans, bottles, or other milk utensils shall not be allowed to stand in any place where they are exposed to dirt, dust, flies, or other contamination, but shall be placed upon racks without pegs, said racks being at least 3 feet from the floor, and wash tanks and rinsing tanks used for the cleaning of cans, bottles, and other milking utensils shall not be used for any other purpose.

SEC. 32. The floors of wash houses or dairies and milk depots shall be water-tight; and where such floor is to be renewed or reconstructed it shall be made of cement, artificial stone, asphaltum, or bitumen, and shall have a surface drain connected with a sewer or, where there is no sewer, connected with the common drain.

SEC. 33. Wash tanks and tubs for cleaning and rinsing milking utensils, if of wood, must be metal lined. Wash tanks and tubs and the floors of wash rooms must be cleaned daily.

SEC. 34. All brushes, scrapers, and other appliances used in cleaning cans, bottles, and other utensils must be sterilized daily, and at all times must be free from incrustations and accumulated dirt.

SEC. 35. Every dairy shall be supplied with pure water, the source whereof shall not be contaminated by any barnyard, privy, sewer, or other possible source of contamination. Cows shall not be allowed to drink from stagnant pools and shall have full access at all times to a supply of pure water.

SEC. 36. Milk cans, containing milk or empty, delivered to or received from grocery stores, bakeries, delicatessen stores, restaurants, depots, or other similar places shall not be left upon the sidewalk or street.

SEC. 37. In the transportation of milk, no milk shall be transferred on the public streets from one can to another, except from a wagon can to a delivery can, nor shall milk cans be allowed to stand on the street.

SEC. 38. The portion of wagons in which milk cans are carried shall have a canvas covering.

SEC. 39. Any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine not to exceed \$500 or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

Milk and Milk Products—Production, Care, and Sale. (Ord. 78 N. S., Aug. 20, 1912.)

The board of health authorized to provide for the inspection of milk dairies and dairy cows, etc.—SECTION 1. The board of health of the city of Vallejo is hereby authorized, empowered, and directed to regulate and control the traffic of milk in said city, to provide for the inspection of milk in said city of Vallejo, and for the inspection of dairies, dairy farms, and dairy cows producing milk for sale or consumption within or importation into said city.

SEC. 2. Any place or store devoted in whole or in part to the sale or distribution of milk products is a dairy within the meaning of this ordinance.

SEC. 3. No person shall maintain or carry on the business of a dairy within the limits of the city of Vallejo without having first obtained from the board of health a permit to maintain a dairy.

SEC. 4. Any place or premises upon which milk is produced for sale or distribution is a dairy farm within the meaning of this ordinance.

SEC. 5. No person shall maintain or carry on the business of a dairy farm within the limits of the city of Vallejo without having first obtained from the board of health a permit to maintain a dairy farm.

Permits required by vendors of milk.—SEC. 6. No person shall after this ordinance becomes operative, either himself or through his agents, servants, or employees, ship or send into, bring into, or offer or expose for sale, or sell or deliver for sale, use, or consumption within the city of Vallejo any milk without first having obtained from the board of health of the city of Vallejo a permit so to do. One permit shall be required for each place of general sale or storage of milk.

Applications for permits to be made to the board of health on blanks provided by said board.—SEC. 7. To procure any such permits the applicant shall present to said board of health a written application, and shall state therein the name and business and residence address of the applicant or applicants, the source or sources from which said applicant or applicants obtain or will obtain supplies of milk, the number of cows in the possession of such applicant, the average quantity of milk procured, and the average quantity of milk disposed of by said applicant and the manner and character of such disposition, and such other matters as may be required by the board of health, such application to be made to the said board of health upon printed blanks to be provided by the board of health for such purpose. Such application shall further state the specific brand or business name, if any, under which said milk is to be imported, sold, exchanged, or distributed.

If the board of health is satisfied with the statement of the applicant, it shall be its duty to issue, without cost, the permit applied for—All statements of applicants to be registered.—SEC. 8. If the board of health, upon such application and such investigation and inspection as it may make, shall determine that the statements therein are true

and that the applicant does not intend to bring into, sell, expose or offer for sale, exchange, deliver, or distribute within the city of Vallejo any unwholesome milk as food for any human being, and that the production, transportation, storage, and handling of the same is to be under sanitary conditions, it shall issue the appropriate permit therefor according to the nature of the business to be transacted or conducted by the applicant.

Sec. 9. No permits shall be sold or assigned or transferred. Permits shall be subject at all times to revocation by said board of health in its discretion upon sufficient cause therefor shown: *Provided, however,* That no such permit shall be revoked until after a hearing given by said board of health in the matter of the revocation of such permit after 5 days' notice in writing has been served on the owner of such permit: in the manner prescribed for the service of notice by section 1011 of the Code of Civil Procedure of the State of California, which notice shall state the ground of complaint against such owner, and the time and place where such hearing shall take place: *Provided, however,* That when the holder of any permit shall have been convicted in any court of any violation of this ordinance or of any law relating to the production, transportation, storage, sale, or distribution of milk, such permit may be revoked without notice.

Holders of permits to make statements to board of health.—**Sec. 10.** As often as required by the board of health, and at least once in each year, every person or persons, firm, or corporation holding any permit shall register with the said board of health his or their name and permit number, and shall make a written statement to the board of health containing all the information required to be given by applicants for permits in their written application for permits as hereinbefore provided, and all applications for permits and all such written statements required as aforesaid shall be registered in a register to be provided by the said board of health and kept for that purpose.

Sec. 11. When a permit shall have been revoked by the board of health, no further permit shall be granted by said board to the same person, firm, or corporation until he, they, or it shall file with said board a bond in the sum of \$500, with two sureties approved by the board, conditioned for the faithful observance of all the regulations of the law and of said board relating to the production, importation, sale, delivery, and distribution of milk.

Sec. 12. No person, firm, or corporation shall send into, bring into, sell, expose, or offer for sale, exchange, deliver, or distribute within the city of Vallejo any milk from any dairy or dairy farm which has not procured a permit according to this ordinance, or whose permit shall have been revoked.

Sec. 13. Whenever and as often as required by the board of health any person maintaining a dairy in or bringing milk into the city of Vallejo shall furnish to the board of health a full and true statement, under oath, of the sources of supply of the milk imported, sold, or distributed by him, with the names of the persons from whom the same is obtained and the amount from each source.

Sec. 14. The dairy herd on any farm receiving a permit to produce or ship milk into the city of Vallejo shall undergo an annual physical examination which shall include the testing of said herd with tuberculin, and every bovine on the farm over 6 months of age shall be required to submit to said physical and tuberculin test; and all animals reacting to said tuberculin test shall be branded "T. B.," and removed from said dairy herd; and all additions made to said dairy herd shall undergo the physical and tuberculin test before said additions are admitted to the herd; further, the entire herd and every bovine on said farm over 6 months of age shall be annually retested prior to the reissuance of a permit. All bovines passed shall be tagged with a numbered metal tag bearing date of test and the words, "Tested and passed."

Milkers.—No person suffering from a communicable disease, or who is in contact or who has been recently exposed to any contagious or infectious disease, shall be permitted to milk, handle milk or milk utensils upon the dairy farm, nor shall any milk

be brought into, sold, or offered for sale from any dairy farm, when any contagious or infectious disease exists on said dairy farm, until such time as said premises have been inspected and declared free of contagion by an employee of the department of public health of the city of Vallejo. All milking must be done with clean, dry hands. All milkers and those handling milk must wear clean outer clothing.

Utensils.—All utensils must be scrubbed with clean, hot water, rinsed and scalded, and kept free from dust at all times when not in use. All utensils must be smoothly soldered and of such shape as to be readily cleaned. All pails used for milking must be covered or protected in such a manner that top or opening is not over 7 inches in diameter.

Stables.—Floors must be of concrete, not less than 3 inches in thickness, covered with a finishing layer of cement not less than one-half inch in thickness, or asphaltum 1 inch in thickness, or other material of a nature impervious to moisture.

Gutter drains must be provided in the rear of the stalls of sufficient size to carry off all discharges, and said gutter drains shall connect with a common drain that will be adequate to carry off all animal discharges to a cesspool to a point to be determined by the department of public health.

All stables having a loft must have ceiling of that portion used as a milking shed ceiled with tongue and groove lumber in such a manner as to be dust proof from loft above.

Adequate light and ventilation must be provided, and in a manner satisfactory to the department of public health. All stables shall be whitewashed at least twice a year and at such other times as may be required by the department of public health. All ceilings and sidewalks shall be scraped, cleaned, and washed at least once each month, and all walls behind the cows to a height of 5 feet shall be whitewashed not less than once a year.

Corral or barnyard.—Must be dry and kept free from accumulations of manure.

Water supply.—Must be abundant, pure, accessible, and free from the possibility of contamination of sewerage or animal refuse or discharges.

Venders of milk, whether by wagon or otherwise, must conspicuously display the number of their permit.—SEC. 15. No person, or persons, firm, or corporation shall sell or expose for sale or exchange or delivery or distribute within the limits of the city of Vallejo, milk from any wagon or vehicle unless such wagon or vehicle shall have exposed on both sides thereof the permit number of the person or persons, firm, or corporation selling or offering or exposing for sale, or distributing, or delivering or exchanging such milk. Such permit number shall be painted on said wagon or vehicle in numbers not less than 3 inches in height, in what are known as Arabic numerals, and shall be placed on said wagon or vehicle under the direction and according to the requirements of the said board of health; and in case milk is sold from cans or vessels (carried by human beings or on horseback), then the permit number of the person or persons, firm, or corporation so selling or offering for sale, delivery, or distribution, or exchange such milk, shall be placed in a conspicuous place on such can or vessel immediately below the opening thereof, so as to be plainly apparent on superficial inspection; or if such milk is sold or exposed or offered for sale, delivery, distribution, or exchange within a store or house, or on the sidewalk of any street in this city, then such permit number shall also be constantly exposed in some conspicuous manner at the place wherever such milk is sold or kept, so as to be plainly apparent.

No person shall sell or offer for sale any impure, adulterated, or unwholesome milk.—SEC. 16. It shall be unlawful for any person or persons, firm or corporation, by themselves or by their agents, servants, or employees in the city of Vallejo, State of California, to render or manufacture, sell, offer for sale, exchange, deliver, distribute, or have in his, its, or their possession, with intent to sell, expose or offer for sale or exchange or distribute for human consumption, any impure, adulterated, unhealthy, or unwholesome milk.

SEC. 16a. It shall be unlawful for any person or persons, firm, or corporation, by themselves, or by their agents, servants, or employees, to bring or cause to be brought into the city of Vallejo, State of California, any impure, adulterated, unhealthy, or unwholesome milk.

Definition of terms adulterated, impure, unhealthy, and unwholesome.—SEC. 17. The terms adulterated, impure, unhealthy, and unwholesome, as used in this ordinance, mean:

First. Milk containing less than 3.4 per cent of milk fats and less than 8.5 per cent of solids not fat.

Second. Milk drawn from cows within 25 days before or within 5 days after parturition.

Third. Milk drawn from cows fed on any unhealthy or unwholesome food.

Fourth. Milk drawn from cows kept in an unhealthy or unsanitary condition, or from cows affected with any form of disease, or from cows which are supplied with water which is impure or unwholesome.

Fifth. Milk from which any part of the cream has been removed.

Sixth. Milk which has been diluted with water or with any other fluid, or to which has been added or into which has been introduced any foreign substance whatever.

Seventh. Milk drawn from cows or by milkers that are themselves in a condition of filth or uncleanness.

Eighth. Any milk which is shown by analysis to contain any substance or substances of any character whatsoever not natural or normal constituents of milk, or to have been deprived either wholly or in part of any constituent naturally or normally contained in milk.

Carrying upon any milk wagon swill, refuse, garbage, etc., forbidden.—SEC. 18. It shall be unlawful for any person or persons, firm or corporation to have or to carry on any wagon or vehicle upon or from which milk or cream is being or is brought, carried stored, deposited, sold, exchanged, delivered, or distributed or offered or exposed for sale or distribution as food for any human being, any swill, garbage, refuse, or any decaying or fermenting, putrefying, foul, unwholesome, noxious, or filthy matter, or any cans or receptacles containing any material or substance with which cream or milk might be diluted, adulterated, or rendered impure, unwholesome, or unhealthy.

Officers, agents, and employees of the board of health—Powers of, with regard to inspection of premises of any vendor of milk.—SEC. 19. In order to carry out the purposes and provisions of this ordinance, the said board of health and all its officers, agents and employees shall have the right at any and all times to enter upon or into the premises of any producer or vendor or distributor of milk authorized under the provisions of this ordinance, and any refusal upon the part of such producer, vendor, or distributor to allow such entry and such inspection as may be required and directed by the said board of health may be punished by the revocation of the permit of such producer, distributor, or vendor by the said board of health.

Inspection of dairies the duty of the board of health.—SEC. 20. It shall be the duty of the said board of health to cause the dairies, dairy farms, and other establishments from which milk brought into the city of Vallejo is obtained, to be inspected from time to time to satisfy such board that the provisions and requirements of this ordinance and of the board of health are constantly complied with.

Rights and duties of the board of health and their employees to enter all premises for the purpose of inspecting milk.—SEC. 21. The said board and all its officers, agents, and employees shall have the right and it shall be their duty to enter and have full access, egress, and ingress to all places where milk is stored or kept for sale, and to all wagons, carriages, or other vehicles, railroad cars, steamboats, or conveyances of every kind used for the conveyance or transportation or delivery of milk for the purpose of consumption in the city of Vallejo.

Owners of dairies to report to the board of health any knowledge they may have as to impurity of milk.—SEC. 22. It shall be the duty of the owner, agent, or manager of any dairy or dairy farm in the city of Vallejo, or of any dairy or dairy farm from which milk is brought into this city to forthwith report to the board of health of said city in writing anything of which he has knowledge or notice tending to render milk obtained from such dairy unwholesome, impure, or unhealthy.

Interference with officers of the board of health in performance of their duty prohibited.—SEC. 23. It shall be unlawful for any person or persons, firm, or corporation to obstruct or interfere with the said board of health or any officer, agent, or employee of said board in the performance of any of the duties required by this ordinance.

Milk coming from outside the city to be exposed for inspection.—SEC. 24. It shall be the duty of all owners or consignees of milk brought into the city of Vallejo by any water craft, to have the same tendered and exposed for inspection by the said board of health, its officers, agents or employees according to the requirements of said board of health: *Provided*, That said milk shall not be detained for inspection for a longer period than one hour. It shall be the duty of the owner or consignee of milk brought into the city of Vallejo by land over any road or railroad leading into Vallejo to cause the same to be tendered and exposed for inspection according to the requirements of said board of health: *Provided*, That said milk shall not be detained for inspection a longer period than one hour.

Milk to be tightly covered.—SEC. 25. It shall be unlawful to sell, offer for sale, expose for sale, or ship into the city of Vallejo for human consumption, any milk or cream in any tank or container holding more than 3 gallons, which is not provided with a proper and tight-fitting mushroom cover.

Penalty for violation of provisions of this ordinance.—SEC. 26. Any person who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not less than \$25 and not more than \$500, or by imprisonment in the county jail for not more than 100 days.

Cows—Keeping of, Within City Limits. (Ord. 77 N. S., Aug. 20, 1912.)

SECTION 1. It shall be unlawful for any person, firm, association, or corporation to keep or cause to be kept any cow or cows within the corporate limits of the city of Vallejo without first obtaining from the board of health of said city written permission so to do. Such permission shall not be granted unless an application therefor shall be made in writing and filed with the secretary of the board of health.

SEC. 2. Any person, firm, association, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$60 or by imprisonment in the city jail for not more than 60 days, or by both such fine and imprisonment.

SEC. 3. Ordinance No. 345, entitled "An ordinance prohibiting the keeping of more than two cows within the corporate limits," adopted March 31, 1910, and all ordinances, in so far as they conflict with this ordinance, are hereby repealed.

Communicable Diseases—Information Concerning, to be Supplied by Board of Health. (Ord. 90 N. S., Aug. 22, 1912.)

SECTION 1. The board of health shall send to the superintendents, principals, and teachers of all public, parochial, and private schools, at least once in each school year, circulars prepared under the direction of the health officer, giving a description of the symptoms of the communicable diseases of children, and of the parasitic diseases of the skin, including pediculosis, scabies, and favus.

SEC. 2. The board of health, upon obtaining information as to the existence of a case of tuberculosis or pneumonia, shall send to the physician, surgeon, or nurse or other person attending the case, printed circulars, giving, in clear and simple language, information concerning the communicability, dangers, and methods of prevention of

tuberculosis or pneumonia, as the case may be, together with a request that the circulars be given to the parent or to a responsible member of his family.

SEC. 3. The board of health, upon the request of a physician, surgeon, nurse, or other person attending a case of tuberculosis, shall send a representative to the house of the patient to give information concerning the communicability, dangers, and methods of prevention of tuberculosis.

SEC. 4. The board of health, upon obtaining information as to the occurrence of a case of tuberculosis in any tenement house, hotel, lodging house, boarding house, hospital, prison, or asylum, shall send a representative to leave circulars, as provided in section 2 of this ordinance, and to give information as provided in section 3 of this ordinance.

SEC. 5. The board of health, upon obtaining information as to the occurrence of a case of tuberculosis of any person unable to pay for medical assistance, shall send the city physician to take charge of the case and to report the same to the health office.

SEC. 6. The board of health shall preserve all reports upon cases of tuberculosis and the records of the same.

SEC. 7. The board of health shall once each year, or oftener if necessary, send to every physician, surgeon, and nurse, printed circulars giving a description of the most approved methods of destruction or disinfection of the discharge of persons having actinomycosis, bronchitis, cholera, cholera infantum, diphtheria, dysentery, influenza, measles, pneumonia, rubella, scarlet fever, laryngeal and pulmonary tuberculosis, and typhoid fever, and all contagious diseases.

SEC. 8. It shall be unlawful for any person or persons, firm, or corporation to obstruct or interfere with the said board of health, or any officer, agent, or employee of said board, in the performance of any of the duties required by this ordinance, and any person, persons, firm, or corporation so obstructing or interfering with the said board of health, or any officer, agent, or employee of said board, shall be guilty of a misdemeanor, and upon conviction thereof shall be punishable by a fine of not more than \$60 or by imprisonment in the county jail for not more than 60 days, or by both such fine and imprisonment.

Tuberculosis—Reporting of Cases of—Precautions to Prevent Infection. (Ord. 101 N. S., Aug. 24, 1912.)

Reports of physicians and others.—SECTION 1. Tuberculosis is hereby declared to be a communicable disease dangerous to the public health. It shall be the duty of every physician practicing in the city of Vallejo, and of every person in charge of any hospital, dispensary, or other private or public institution in said city to report in writing to the board of health the name, age, sex, color, occupation, address, and place where last employed of every person having tuberculosis which comes under his care or observation. Said reports shall be made in writing on a form furnished as hereinafter provided, and shall be forwarded to said department of public health within 24 hours after knowledge of the case comes to said physician or person.

Examination of sputum.—SEC. 2. It shall be the duty of the health officer, when so requested by any physician or by authorities of any hospital or dispensary, to make, or cause to be made, a microscopical examination of the sputum sent him as that of a person having symptoms of tuberculosis, accompanied by a blank giving name, age, sex, color, occupation, place where last employed, if known, and address of the person whose sputum it is. It shall be the duty of the health officer to promptly make a report of the results of such examination free of charge to the physician or person upon whose application the same is made.

Protection of records.—SEC. 3. It shall be the duty of the health officer to cause all reports and all results of examination showing the presence of bacilli of tuberculosis made in accordance with provisions of sections 1 and 2 respectively of this ordinance

to be recorded in a register, of which he shall be the custodian. Such register shall not be open to inspection by any person other than the health authorities of the State and of the city, and said health authorities shall not permit any such report or record to be divulged so as to disclose the identity of the person to whom it relates, except as may be necessary to carry into effect the provisions of this ordinance.

Disinfection of premises.—SEC. 4. In case of vacation of any apartment or premises by the death or removal therefrom of a person having tuberculosis, it shall be the duty of the attending physician, or if there be no such physician, or if such physician be absent, of the owner, lessee, occupant, or other person having charge of said apartment or premises, to notify the department of public health of said death or removal within 24 hours thereafter; and such apartment or premises so vacated shall not be occupied until duly disinfected, cleaned, or renovated, as hereinafter provided. Further, it shall be unlawful for any person suffering from tuberculosis to change his or her residence or to be removed therefrom until the department of public health has been notified, so that the vacated apartment or premises may be disinfected, cleaned, or renovated.

Health officer to direct disinfection, cleaning, or renovating.—SEC. 5. When notified of the vacation of any apartment or premises as provided in section 4 thereof, the health officer or one of his deputies shall thereafter visit said apartment or premises and shall order and direct that except for purposes of cleaning or disinfection no infected article shall be removed therefrom until properly and suitably cleansed or disinfected, and said health officer or deputy shall determine the manner in which said apartment or premises shall be disinfected, cleansed, or renovated, in order that they may be rendered safe and suitable for occupancy.

After the health authorities determine that disinfection is sufficient to render them safe and suitable for occupancy, said apartment or premises, together with all infected articles therein, shall be immediately disinfected by the department of public health; or if the owner prefers, by the owner at his expense to the satisfaction of the health officer. Should the health officer determine that such apartment or premises are in need of thorough cleaning or renovating, a notice to this effect shall be served upon the owner or agent of said premises, and said owner or agent shall proceed to the cleaning or renovating of said apartment or premises in accordance with the instructions of the health officer, and such cleansing and renovating shall be done at the expense of said owner or agent. Such articles that can not be disinfected or renovated to the satisfaction of the health officer shall be destroyed.

Prohibiting occupancy until order of health officer is complied with.—SEC. 6. In case the orders or direction of the health officer requiring the disinfecting, cleansing, or renovating of any apartment or premises or any article therein as hereinbefore provided shall not be complied with within 48 hours after said orders or directions shall be given, the health officer may cause a placard in words and form substantially as follows to be placed on the door of the infected apartment or premises:

"Tuberculosis is a communicable disease. These apartments have been occupied by a consumptive and may be infected. They must not be occupied until the order of the health officer directing the disinfection or renovation has been complied with. This notice must not be removed under the penalty of the law except by the health officer or other duly authorized official."

Prohibiting carelessness of a person having tuberculosis.—SEC. 7. Any person having tuberculosis who shall dispose of his sputum, saliva, or other bodily secretion or excretion so as to cause offense or danger to any person or persons occupying the same room or apartment, house, or part of house, shall, on complaint of any person subject to such offense or danger, be deemed guilty of a nuisance; and any person subject to such nuisance may make complaint in writing to the health officer, and it shall be the duty of the health officer receiving such complaint to investigate, and if it appears that the nuisance complained of is such as to cause offense or danger

to any person occupying the same room, apartment, house, or part of a house, he shall serve a notice on the person so complained of, reciting the alleged cause of offense or danger, and requiring him to dispose of his sputum, saliva, or other bodily secretion or excretion in such a manner as to remove all reasonable cause of offense or danger.

Protection of patient's family.—SEC. 8. It shall be the duty of a physician attending the patient for tuberculosis to take all proper precautions and to give proper instruction to provide for the safety of all individuals occupying the same house or apartment.

Forcible removal.—SEC. 9. Whenever a person having tuberculosis is unable for financial reasons, or from any other cause, to comply with the rules of the board of health providing the precautions to be observed to prevent the spread of infection, or when such person willfully refuses to comply with said rules, and in all cases where children are unavoidably exposed to infection, the board of health may, on presentation to it of proof that such person is a sufferer from tuberculosis, order his immediate removal to a hospital or other institution for the care of sufferers from tuberculosis. Such person shall not be permitted to leave such hospital or other institution until the danger of infection has been removed or he is able and willing to comply with the precautions and rules herein referred to.

Printed precautions to be furnished by health officer.—SEC. 10. It shall be the duty of the health officer to transmit to a physician reporting a case of tuberculosis as provided in section 1 of this ordinance a printed statement and report naming such procedure and precautions as are necessary or desirable to be taken on the premises of a tubercular patient. Upon receipt of such statement or report the physician shall either carry into effect all such procedures and precautions as are therein prescribed, and shall thereupon sign and date the same, and return to the health officer without delay; or if such attending physician be unwilling or unable to carry into effect the procedure and precautions so specified, he shall so state on this report, and immediately return the same to the health officer and the duties therein prescribed shall thereupon devolve upon said health officer. Upon the receipt of this statement and report, the health officer shall examine the same and satisfy himself that the attending physician has taken all necessary and desirable precautions to insure the safety of all persons living in the apartment or premises occupied by the person having tuberculosis. If the precautions taken or instructions given by the attending physician are, in the opinion of the health officer, not such as will remove all reasonable danger or probability of danger to the persons occupying the same house or apartments or premises, the health officer shall return to the attending physician the report, with a letter specifying the additional precautions or instructions which the health officer shall require him to make or give; and the said attending physician shall immediately take the additional precautions and give the additional instructions specified, and shall record and return the same on the original report to the health officer. It shall be the duty of the health officer to transmit to every person reporting any case of tuberculosis, or if there be no attending physician, to the person reported as suffering from this disease, a circular or information which shall inform the consumptive of the precautions necessary to avoid transmitting the disease to others.

Penalty for false statement.—SEC. 11. It shall be unlawful for any physician, or person practicing as a physician, to report knowingly as affected with tuberculosis any person who is not so affected or willfully make any false statement concerning the name, sex, color, occupation, place where last employed, if known, or address of any person reported as affected with tuberculosis, or certify falsely as to any of the precautions taken to prevent the spread of infection.

School attendance.—SEC. 12. No instructor, teacher, pupil, or child affected with pulmonary tuberculosis shall be permitted to attend school by any superintendent, principal, or teacher of a public, private, or parochial school, except by written permission of the health officer.

Report of recovery.—SEC. 13. Upon the recovery of any person having tuberculosis, it shall be the duty of the attending physician to make a report of this fact to the health officer, who shall record the same in the records of his office and shall relieve said person of further liability of any requirements imposed by this act.

SEC. 14. Any person violating any of the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$60, or shall be imprisoned in the county jail for a period not exceeding 60 days, or by both such fine and imprisonment.

Communicable Diseases—Removal of Persons Afflicted with Certain. (Ord. 89 N. S., Aug. 22, 1912.)

SECTION 1. The board of health of the city of Vallejo is hereby authorized and empowered to remove or cause to be removed any person or persons afflicted with smallpox, cholera, yellow fever, bubonic plague, or typhus fever residing in or being found in houses, places, or districts within the city of Vallejo, to such hospital as said board of health may designate; provided that no action looking toward the removal of any person afflicted with any of the above enumerated diseases shall be taken by said board of health, after due and satisfactory investigation made personally by him.

Contagious or Infectious Diseases in Animals—Reporting of Cases of. (Ord. 93 N. S., Aug. 23, 1912.)

Cases of glanders to be reported to the board of health.—SECTION 1. Every veterinary physician or surgeon, and every person practicing as such, and every person owning or having animals in his care within the city of Vallejo, shall present to the board of health of said city a written notice of the existence of any and every case of glanders or farcy, or other contagious or infectious disease in animals, which may have come under his observation or to his knowledge, which notice shall be given within two days thereafter, and shall contain the name and residence of the possessor of the animal so diseased so far as the same can be ascertained, a description of the animal, and where last seen by the person giving the notice, and be signed by him.

Penalty.—SEC. 2. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than \$20 nor more than \$500, or by imprisonment in the county jail not less than 20 days nor more than 6 months.

Communicable Diseases—Quarantine. (Ord. 82 N. S., Aug. 21, 1912.)

SECTION 1. The board of health of this city is hereby authorized and empowered to quarantine persons, houses, places, and districts within this city when in its judgment it is deemed necessary to prevent the spreading of contagious or infectious diseases.

Communicable Diseases—Reporting of Cases of—Quarantine—Disinfection—Funerals—Burial. (Ord. 82 N. S., Aug. 21, 1912.)

SECTION 1. The term "contagious disease" shall include every disease of an infectious, contagious, or pestilential nature, particularly cholera, yellow fever, smallpox, varicella, pulmonary tuberculosis, diphtheria, membranous croup, scarlet fever, typhus fever, measles, pneumonia, and every other disease publicly declared by the board of health to be dangerous to the public health.

SEC. 2. Every physician must report in writing to the board of health within 24 hours after he has been called to attend any person affected with any infectious, contagious, or pestilential disease, the name and place of residence of such person, and the name and state of the disease. In the event of the death of any person

afflicted with any such diseases the attending physician must report in writing to the board of health within 24 hours thereafter the name and place of residence of the deceased and the specific name and type of such disease.

SEC. 3. Every physician and every person having the control or management of any public or private institution or dispensary shall report in writing to the board of health the name, age, sex, occupation, and place of residence of every person afflicted with pulmonary tuberculosis who shall have come under his care within 1 week thereafter.

SEC. 4. Every person afflicted with pulmonary tuberculosis and every person in attendance upon any person so afflicted and every person in charge of any private or public hospital or dispensary shall observe and enforce all sanitary rules and regulations adopted by the board of health to prevent the spread of pulmonary tuberculosis.

SEC. 5. It shall be unlawful for any person to interfere with or obstruct the officers or inspectors of the board of health in the examination of any building or premises wherein a person is reported to be afflicted with any infectious, contagious, or pestilential disease.

SEC. 6. The board of health is hereby authorized and empowered to post in a conspicuous place upon any building or premises wherein any person is afflicted with any infectious, contagious, or pestilential disease a notice specifying the name of such disease. It shall be unlawful for any person to interfere with the posting of such notice or to tear down or mutilate any notice so posted by the board of health in and upon any building or premises.

SEC. 7. Whenever the board of health shall have reason to suspect the presence of an infectious, contagious, or pestilential disease within any building or premises, and the physician in attendance or the head of the family refuses to permit the representative of the board of health to examine the person suspected of being afflicted with such disease, the board of health shall quarantine the premises and prevent egress and ingress from and to the same until such examination is permitted or until said board has practiced disinfection and detention to its satisfaction.

SEC. 8. Whenever any person residing in a hotel, boarding house, lodging house, or tenement house is afflicted with any infectious, contagious, or pestilential disease, the owner, lessee, keeper, or manager of such place must immediately give notice thereof to the board of health. Immediately upon the receipt of such notice the board of health must cause an examination of the person so afflicted, and if in its judgment it be necessary, it shall cause such hotel, boarding house, lodging house, or tenement house, or any part thereof to be immediately cleansed and disinfected in an effective manner; and the board of health may cause the wall paper thereon to be removed or replaced, and the walls thereof to be whitewashed, or it may cause the bedding and bedclothes used by the person so afflicted to be thoroughly cleansed, scoured, and fumigated, or, if necessary, to be destroyed.

SEC. 9. Every undertaker employed to manage the interment of any person who has died of any infectious, contagious, or pestilential disease must give immediate notice thereof to the board of health. It shall be unlawful for any undertaker to retain or expose or assist in the detention or exposure of the dead body of any such person unless the same be in a coffin or casket, properly sealed, or to allow any such body to be placed in a coffin or casket unless such body has been thoroughly disinfected and wrapped in a sheet saturated with a 1-500 solution of bichloride of mercury, and unless the coffin or casket is of metallic substance and hermetically sealed immediately after the body has been placed therein.

SEC. 10. It shall be unlawful for any person to remove the body of any person who has died from an infectious, contagious, or pestilential disease from the room in which the death occurred, except for burial or cremation; and the body of any person so

dying must be interred or cremated within 24 hours after the time of death: *Provided, however,* That the board of health may by special permit, good cause appearing therefor, extend said time; but in no case shall such extension be for more than 36 hours from the time of death.

SEC. 11. It shall be unlawful for any person having the possession or charge of the remains of any person who shall have died of any infectious, contagious, or pestilential disease to permit such remains to be viewed by any person except the attending physician, the representatives of the board of health, the undertaker and his assistants, and the immediate members of the family of the decedent or to permit formal services to be held over such remains within the premises where the death of such person occurred, or to remove or cause to be removed the body of such deceased person from said premises to any place other than a cemetery or crematory.

SEC. 12. It shall be unlawful for any undertaker to assist in a public or church funeral of the body of any person who has died of an infectious, contagious, or pestilential disease.

SEC. 13. It shall be unlawful for any person, without a written permit from the board of health, to remove or cause to be removed any person afflicted with an infectious, contagious, or pestilential disease from any building to any other building, or from any vessel to any other vessel or to the shore or to any public vehicle.

SEC. 14. It shall be unlawful for any person having charge or control of any person afflicted with an infectious, contagious, or pestilential disease, or having control of the dead body of any person who has died of any such disease, to cause or to contribute to the spread of any such disease by any negligent act in the care of such sick person, or such dead body, or by the needless exposure of himself in the community.

SEC. 15. It shall be unlawful for any principal or superintendent of any public or private school, or any parent, guardian, or custodian of any minor child afflicted with any infectious, contagious, or pestilential disease or in whose household any person is so afflicted to permit such minor to attend any public or private school until the board of health shall have given its written permission therefor.

SEC. 16. Any person who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed \$60 or by imprisonment in the county jail for not more than 60 days, or by both such fine and imprisonment.

Varicella—Reporting of Cases of. (Ord. 92 N. S., Aug. 22, 1912.)

SECTION 1. Every physician practicing in this city shall report in writing to the health officer every case of varicella or chicken pox of which he may have professional knowledge within 24 hours after he shall be satisfied of the nature of the disease.

SEC. 2. Any person violating the above provision shall upon conviction thereof be guilty of a misdemeanor and shall be punished by a fine not exceeding \$60 or imprisonment in the county jail for not more than 60 days.

Undertakers and Embalmers—Permits. (Ord. 110 N. S., Aug. 28, 1912.)

SECTION 1. No person, firm, association, company, or corporation shall establish, maintain, or operate an undertaking or embalming establishment in the city of Vallejo without first obtaining from the board of health a permit to establish, maintain, or operate the same.

SEC. 2. Any person, firm, association, company, or corporation establishing, maintaining, or operating such undertaking or embalming establishment in the city of Vallejo, without first having obtained such permit from the board of health, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not exceeding \$500 or by imprisonment in the county jail for a period not exceeding 6 months, or by both such fine and imprisonment.

Interments—Limit of Time. (Ord. 109 N. S., Aug. 28, 1912.)

SECTION 1. The bodies of all deceased person dying within the city of Vallejo, also the bodies of all deceased persons brought to this city for interment, must be interred or placed in a vault in some cemetery within a period of 5 days from the occurrence of the death of such person dying in this city, and in the case of bodies transported to this city for burial, within a like period of 5 days from and after the date of arrival of such body.

Penalty.—**SEC. 2.** Any person or persons having charge of the disposal of any deceased person's remains, whether such decedent shall have died in the city of Vallejo or have been transported to said city for burial, who shall violate any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be punished by a fine of not less than \$50 nor more than \$100.

Embalming—Certificate of Death. (Ord. 107 N. S., Aug. 28, 1912.)

Embalming without certificate of death or permit from coroner prohibited.—**SECTION 1.** No person shall use any embalming or preservative material in or upon the body of any deceased person, either by what is known as the "cavity injection" or "temporary embalming," or by injection into the blood vessels, or by any other means, or at all, without first obtaining a certificate of death from the attending physician, if there had been one, or in his absence, or in the event there had been no attending physician, then a certificate of death or a permit to embalm from the coroner. Nothing herein contained shall be deemed to forbid the use of ice in and upon such body for the preservation thereof.

Record of the use of any embalming fluid must be kept.—**SEC. 2.** Any person using any of the material mentioned in section 1 (excepting ice), after having obtained the certificate or permit therein required, shall make and keep a record of the use of such material, showing the time and place of its use and the means employed and the material used. Said record shall be exhibited by the person keeping the same to the coroner or any peace officer whenever an exhibition thereof is demanded by him.

Certificate of death to be issued by attending physician within two hours after demand, except where the post-mortem examination is held.—**SEC. 3.** It shall be the duty of every attending physician to give the certificate of death required by law within two hours after demand therefor, except in such cases where a post-mortem examination is necessary to determine the cause of death.

Penalty.—**SEC. 4.** Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than \$100 nor more than \$500 or by imprisonment not exceeding six months, or by both such fine and imprisonment.

Spitting—Prohibited in Public Places. (Ord. 91 N. S., Aug. 22, 1912.)

SECTION 1. No person shall expectorate on the floor of any public building or on any sidewalk in this city.

Placing of receptacles in public buildings.—**SEC. 2.** It shall be the duty of the committee on public buildings to furnish a sufficient number of suitable receptacles for the reception of sputum and cause the distribution and maintenance of the same in public buildings at such locations as may be deemed advisable to afford necessary convenience and accommodation.

Penalty.—**SEC. 3.** Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and be punished by a fine not exceeding \$25 or imprisonment not exceeding 10 days, or by both such fine and imprisonment.

Notices to be posted in public buildings.—**SEC. 4.** The committee on public buildings shall have prepared and caused to be posted and kept posted a sufficient number of notices prohibiting the expectoration upon the floors of said buildings, and the janitors

of and officers of such buildings shall cause the arrest and prosecution of any and all persons violating any of the provisions of this ordinance.

SEC. 5. It shall be, and is hereby, made the duty of the chief of police to cause the provisions of this ordinance to be enforced.

Spitting—Prohibited in Street Cars. (Ord. 85 N. S., Aug. 22, 1912.)

Prohibiting expectoration in street railway cars.—SECTION 1. No person shall expectorate on the floor of any street railway car in the city of Vallejo.

Posting of notices in street railway cars.—SEC. 2. All street railway companies shall keep posted in a conspicuous place in their cars a sufficient number of notices calling attention to the provisions of this ordinance.

Penalty.—SEC. 3. Any person who shall violate the provisions of this ordinance shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in a sum not exceeding \$25, or by imprisonment for a term not exceeding 10 days, or by both such fine and imprisonment.

Street Cars—Cleaning and Disinfection of. (Ord. 86 N. S., Aug. 22, 1912.)

SECTION 1. Every person, company, or corporation operating street railway passenger cars within the limits of the city of Vallejo in which passengers are carried shall thoroughly wash each car, when so operated, at least once a week, and shall carefully sweep and clean each of said cars daily.

SEC. 2. Whenever required in writing by the board of health, all persons, companies, or corporations operating street railway cars within the limits of said city shall thoroughly disinfect each street railway passenger car so operated by spraying said cars with an efficient disinfectant.

SEC. 3. Any person, company, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$500, or by imprisonment in the county jail for not more than 6 months, or by both such fine and imprisonment.

Laundries—Sprinkling of Clothes From the Mouth Prohibited. (Ord. 94 N. S., Aug. 23, 1912.)

SECTION 1. It shall be unlawful for any person or persons, owning or employed in any laundry in the city of Vallejo, to spray the clothing of any person or persons with water emitted from the mouth of said owner or employee.

Penalty.—SEC. 2. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and shall be punished by a fine not exceeding \$50, or by imprisonment in the county jail for not more than 1 month, or by both such fine and imprisonment.

Water—Pollution of, Prohibited. (Ord. 97 N. S., Aug. 23, 1912.)

SECTION 1. It shall be unlawful for any person to put or place in or on, or to allow to run into or on any public reservoir, or the bank, border, or margin thereof, or into any water pipe, aqueduct, canal, stream, or excavation therewith connected, any animal, vegetable, or mineral substance, or to do, perform, or commit any act or thing which will pollute the purity and wholesomeness of any water intended for human consumption.

SEC. 2. Any person who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$500, or by imprisonment in the county jail for not more than 6 months, or by both such fine and imprisonment.

Wells—Permit Required Before Using Water From. (Ord. 96 N. S., Aug. 23, 1912.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to maintain or use any well for the purpose of drawing therefrom any water intended for drinking purposes without first obtaining from the board of health a permit so to do, or to use any well after notice from the board of health to close or fill it.

SEC. 2. Whenever it shall appear to the satisfaction of the board of health that any well, the water of which is used for domestic purposes, has become polluted, or in anywise rendered unsafe for domestic or drinking purposes, or has become otherwise prejudicial to health or dangerous to life, said board of health shall give to the owner or his agent, lessee, tenant, or other person in charge of such well, written notice to close and to fill it within a time to be specified in such notice. If such notice be not complied with, the board of health shall cause such well to be closed and filled up at the cost and expense of the owner thereof.

SEC. 3. Any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$500 or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

Foodstuffs—Preparation, Care, and Serving of—Unwholesome Food—Care of Buildings Where Food is Kept. (Ord. 99 N. S., Aug. 23, 1912.)

SECTION 1. It shall be the duty of the health officer or his assistants to visit at frequent intervals each public and private market, stall, shop, store, warehouse, cannery, factory, restaurant, and storehouse in the city of Vallejo, and to inspect each and all wagons, carts, and vehicles of venders or street hawkers in or about which meat, dairy products, vegetables, fruit, bread, or other provisions are kept, made, held, or carried for sale, or other disposition of foods intended for human consumption, and to examine and carefully inspect all such foodstuffs and provisions.

SEC. 2. Every person keeping, maintaining, or being in charge of any public or private market, stall, shop, store, bakery, ice-cream or candy factory, storehouse, warehouse, cold storage, cart, wagon, or other vehicle in, on, or about which any meat, fish, oysters, birds, fowl, vegetables, fruit, milk, bread, candies, cakes, or other provisions are kept, held, or stored, or offered for sale or other disposition, as food intended for human consumption, shall keep such public or private market, stall, shop, store, bakery, candy factory, ice-cream factory, storehouse, warehouse, cold storage, cart, wagon, or other vehicle in a clean, pure, wholesome condition, and if any person shall allow or permit the same to become or remain unclean, impure, or unwholesome, he shall be guilty of a violation of this ordinance.

SEC. 3. It shall be unlawful to keep meat, game, fish, vegetables, fruits, or other prepared foodstuffs in an open receptacle less than 2 feet above the floor. It shall also be unlawful to keep meat, fish, dairy products, cooked meats, figs, dates, dried fruit, olives, sauerkraut, mincemeat, lard, butter, butterine, candy, crackers, cakes, bread, or any prepared food exposed for sale on the sidewalk in front of, or at any place outside of, or in front of any shop, store, or place mentioned in section 2 hereof, or in any place where the same is exposed to soot, dust, or flies. Every manager, owner, or other person in control of any store, market, or other place where any food products hereinbefore mentioned in this section are prepared for sale, stored for sale, offered for sale or sold, or where food which is prepared for immediate consumption is prepared for sale, stored for sale, offered for sale, or sold, shall cause the same to be screened in such a manner as to prevent flies and other insects from obtaining access to such food and to prevent handling of the same by patrons or prospective purchasers. All fruit, vegetables, meats, and other food kept, or sold, or offered for sale shall be kept in receptacles free from decayed matter of all kinds.

SEC. 4. Every person who shall bring into, hold, keep, offer, or expose for sale, or sell or deliver for sale or consumption within the city of Vallejo, any milk product, meat, vegetable, fish, or bread in any wagon, cart, or other vehicle shall provide such wagon, cart, or other vehicle with a suitable clean canvas cover, which shall be used at all times.

SEC. 5. It shall be unlawful to prepare, keep for sale, or sell any kind of meat, milk product, fish, game, vegetable, cake, fruit, bread, candy, or other food in any room in which a toilet is located, or in any room opening directly into a toilet room, unless there is outside ventilation to such toilet room.

SEC. 6. All dealers in meat, fowls, fish, vegetables, fruit, groceries, or other foods intended for human consumption shall maintain in their respective places of business and in the part of the building occupied by them for business purposes at least one water faucet connected by pipes with a suitable water supply. Sanitary lavatory convenience must be provided for the use of employees.

SEC. 7. The baking of bread, cakes, pies, the manufacturing of candy, or the cooking of other food is prohibited from being done in a cellar or basement or other room where there is not direct ventilation to the outer air. It shall be unlawful for any person to sell, or offer for sale, any bread, cake, pastry, or baked food products having attached to it a label or stamp which is affixed thereto by any foreign adhesive substance.

SEC. 8. Any person or persons owning or managing or in charge of any canning establishment or other place where meats, fish, oysters, fowls, fruits, vegetables, or other foods are canned or preserved for human consumption who shall keep or conduct said places in an unclean, unwholesome, or insanitary manner; and any person canning, curing, or otherwise preserving any meats, fish, oysters, fowls, fruits, or vegetables for human consumption who shall utilize in this way any diseased, tainted, or unwholesome meat, fish, oysters, fowls, or any diseased or decayed or unwholesome fruit or vegetables from filthy boxes, baskets, or other container, or use any chemicals therein deleterious to health, shall be deemed guilty of violating this ordinance.

SEC. 9. It shall be unlawful for any person in charge of any restaurant, hotel or boarding house, or other place where food is sold or served in cooked or raw state to keep such place in an unclean or insanitary condition, and all persons employed in or about such places shall keep themselves and their clothing in a cleaned, healthful condition.

SEC. 10. It shall be unlawful for any person maintaining or in charge of any restaurant, hotel, boarding house, or other place where meals or lunches are served in a cooked state or otherwise to serve or cause to be served any tainted or diseased meat, fish, oysters, fowl, or any diseased, decayed, or partially decayed or unwholesome fruit, vegetables, or any unwholesome food whatever to any person or persons, either at said place or sent to any person or persons to be eaten at any other place.

SEC. 11. It shall be unlawful for any person or persons to keep live chickens, ducks, geese, turkeys, or other live fowls in any cellar or basement underneath any grocery store, market, or other place where foodstuffs are kept for sale. It shall also be unlawful for any person or persons to keep any live chickens, turkeys, ducks, geese, or like fowl of any kind where foodstuffs, such as are enumerated in section 2 and section 3 hereof, are kept, prepared for sale, or sold. Slaughterhouses and other places where fowl are killed and prepared for sale or storage shall be constructed with water-tight flooring, with properly trapped sewer connections, and these connected with the sewer, and immediately after each killing the floor shall be thoroughly washed and the place at all times kept in a clean and wholesome condition.

SEC. 12. If the health officer shall find any public or private market, stall, shop, store, bakery, storehouse, cold-storage warehouse, stockyard, slaughterhouse, cart, wagon, or other vehicle in an unclean or unwholesome condition, notice shall be given to the person in charge thereof to clean and purify the same within 24 hours from the time of such notice, and if any person so in charge shall not put the same in a clean,

wholesome, and properly sanitary condition within such time, then such person shall be guilty of violating this ordinance and subject to the punishment provided thereof.

Sec. 13. Any person violating any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$300, or by imprisonment not to exceed 60 days, or by both such fine and imprisonment.

Watercress, etc.—Gathering From Polluted Water Prohibited. (Ord. 98 N. S., Aug. 23, 1912.)

SECTION 1. No person shall gather or sell, or offer for sale, or keep, or keep for sale, or give, or distribute, or otherwise dispose of any watercress or any other edible herb or vegetable which has or is or may be growing within 1,000 feet of any sewer outlet or any cesspool or any other place where stagnant water, seepage, or other drainage, or any offensive matter, or any matter dangerous to health has or may be accumulated.

Sec. 2. Every person who shall violate any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not more than \$60 or by imprisonment for not more than 60 days, or by both such fine and imprisonment.

Vegetables—License Required for Sale of—Sprinkling With Polluted Water Prohibited. (Ord. 100 N. S., Aug. 23, 1912.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to use human discharges or excrement, or any water containing human discharges or excrement, or the waters of any well, spring, pond, or creek which receives any discharges of any sewer or drain, or which by any means whatever has become polluted with sewerage discharges, for the purpose of irrigating or sprinkling vegetables used for human consumption.

Sec. 2. It shall be unlawful for any person, firm, or corporation to bring into the city of Vallejo, or to produce, sell, or offer for sale or consumption in the city of Vallejo, without first obtaining a license from the board of health to produce, sell, or offer for sale, vegetables for human consumption; and, further, they shall also be required to have a certificate signed by the health officer that said vegetables are produced in a manner that does not violate any of the provisions of section 1 of this ordinance, and that the same are being handled and transported in wagons and containers satisfactory to the board of health, and said wagons and containers shall bear the legend, "Inspected by the department of public health, Vallejo, California," before license for their operation is issued.

Sec. 3. Any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not less than \$25 and not more than \$500 or by imprisonment in the county jail not exceeding 6 months or by both such fine and imprisonment.

Meat—Protection of, When Transported. (Ord. 79 N. S., Aug. 21, 1912.)

SECTION 1. It shall be unlawful for any person to transport any beef, mutton, veal, pork, or the carcass of any animal used for food, along any public street unless it be so covered, or unless the vehicle in which it is transported be so constructed, as to entirely protect the meat from dust and dirt, and so that the same may not be exposed to view.

Sec. 2. Any person who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed \$60 or by imprisonment in the county jail for not more than 60 days, or by both such fine and imprisonment.

Calves—Slaughter or Sale for Food. (Ord. 80 N. S., Aug. 21, 1912.)

SECTION 1. No person shall slaughter, expose for sale, or sell in or bring within the city for sale for human food any calf unless it is in a good, healthy condition and 4 weeks of age.

SEC. 2. Any article or animal that shall be offered or exhibited for sale in any market or elsewhere, as though it was intended for sale, shall be deemed offered or exposed for sale within the intent and meaning of this ordinance.

SEC. 3. *Penalty.*—Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$60 or by imprisonment in the county jail not to exceed 60 days, or by both such fine and imprisonment.

Foodstuffs—Construction of Floors Where Prepared. (Ord. 103 N. S., Aug. 24, 1912.)

SECTION 1. All floors of buildings used as fish markets, bakeries, sausage factories, candy factories, and other places where foodstuffs are prepared for sale, hereafter established, shall be constructed of concrete or other fireproof material covered with a wearing surface of cement or asphaltum and carried up on all walls at least 8 inches, or if of wooden construction such floor shall be covered with waterproof material, the same to run up on the walls at least 8 inches in height. Over this waterproof material shall be placed a wearing surface of concrete not less than 2 inches in thickness, troweled to a smooth surface, or of mastic not less than 1 inch in thickness. Said wearing surface shall be carried up on walls to the top of the before-mentioned waterproof material.

All floors of meat markets, butter shops, vegetable stores, delicatessen stores, restaurants, and bakeries hereafter established must be constructed of two layers of boards driven tight and each layer not less than 1 inch in thickness, and between said two layers shall be placed galvanized-iron cloth of not less than No. 20 gauge wire whose mesh is not more than one-half inch. Said cloth shall extend over the entire surface of the floor and up on all walls at least 8 inches in height and shall be covered by a baseboard nailed to said walls.

Foodstuffs—To be Destroyed When Tainted or Unwholesome. (Ord. 84 N. S., Aug. 21, 1912.)

SECTION 1. Any article of food or drink in the possession or under the control of any person, firm, association, or corporation which is tainted, decayed, spoiled or otherwise unwholesome or unfit to be eaten or drunk is hereby declared to be, and is, a public nuisance.

SEC. 2. The board of health of the city of Vallejo is hereby authorized and directed to abate said nuisance, and to seize, confiscate, condemn, and destroy any article of food or drink in the possession or under the control of any person, firm, association, or corporation which has become tainted, decayed, spoiled, or otherwise unwholesome or unfit to be eaten or drunk.

SEC. 3. The term "food" as used herein includes all articles used for food or drink by man, whether simple, mixed, or compound.

Bread, Cake, and Pastry—Protection of. (Ord. 88 N. S., Aug. 22, 1912.)

SECTION 1. It shall be unlawful for any person, company, or corporation to carry, transport, or convey, or cause to be carried, transported, or conveyed, through the public streets in open baskets or exposed containers or vehicles or otherwise, any bread, cakes, or pastry intended for human consumption.

SEC. 2. Any person, company, or corporation violating any of the provisions of this ordinance shall be guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine not to exceed \$60, or by imprisonment in the county jail for not more than 60 days, or by both such fine and imprisonment.

Buildings—Must not be Occupied While in Insanitary Condition. (Ord. 102 N. S., Aug. 24, 1912.)

SECTION 1. All buildings, structures, or parts thereof, which are unsanitary, are hereby declared to be and are nuisances, and the board of health is hereby authorized and empowered to abate the same in the manner provided in this ordinance.

SEC. 2. Whenever the health officer of the city of Vallejo shall make written complaint to the board of health that any building, structure, or part thereof, is in an unsanitary condition, the board of health shall, by formal resolution, order a hearing of said complaint and fix the time and place therefor. The complaint shall contain general allegations setting forth the conditions complained of.

SEC. 3. Upon the filing of such complaint, the board of health shall cause a copy thereof, together with a notice of the time and place set for the hearing thereof, to be served personally upon the owner of said structure, building, or part thereof complained of, or his agent, or the lessee or the occupant thereof, and shall cause a copy of said complaint, together with said notice of hearing, to be posted in some conspicuous place on said structure. The time fixed for the hearing of said complaint shall not be less than 48 hours after the serving and posting of the copy of said complaint and said notice. Said notice shall require all persons interested to appear at the hearing to show cause, if any they have, why said structure, building, or the part thereof complained of should not be declared unsanitary.

SEC. 4. The board of health, upon conclusion of said hearing, shall decide upon the facts submitted whether or not said alleged condition constitutes a nuisance under the terms of this ordinance, and shall embody said decision in a formal resolution setting forth its findings.

SEC. 5. The board of health, upon its determination and finding that the structure, building, or part thereof complained of is a nuisance, shall order the vacation of same for all purposes, and shall cause a copy of same to be posted in a conspicuous place on the aforesaid structure, building, or part thereof determined by said board to be a nuisance; and a copy thereof to be personally served upon the owner thereof or his agent, or the lessee or the occupant thereof. The order shall specify the time within which said structure, building, or part thereof determined by the said board to be a nuisance shall be vacated, which shall not be less than 48 hours after the passage of said order and the personal service thereof as above provided.

SEC. 6. The health officer shall give written notification thereof to the chief of police, who shall thereupon, through the officers of the police department, execute and enforce the said order of vacation.

SEC. 7. Any owner or the agent of such owner, or the lessee or the occupant of any structure, building, or part thereof, ordered vacated hereunder, who shall himself or through others forcibly resist or prevent the enforcement of such order, shall be guilty of a misdemeanor, and, upon conviction thereof shall be punished by a fine of not less than \$25 nor more than \$250, or by imprisonment in the county jail for a period of not less than 10 days nor more than 3 months, or by both such fine and imprisonment.

SEC. 8. Unless within 48 hours after the services of notices to vacate, as above provided, the owner or his agent, or the lessee, or the occupant of said building, structure, or part thereof, shall notify the board of health in writing that he will make or cause to be made such alterations or repairs as in the judgment of the board of health shall be necessary for the purpose of making said building, structure, or part thereof sanitary, the board of health shall abate the same. If said notice be given as aforesaid, the board of health shall grant a reasonable time to make said alterations and repairs. If said alterations and repairs are not made and completed within said time allowed by said board, the board of health shall, by formal resolution, order, and in accordance with said order, cause the abatement of said nuisance and the destruction of said

building, structure, or part thereof, herein provided, found and determined to be a nuisance.

SEC. 9. The structure, building, or part thereof vacated hereunder shall not be reoccupied without the written permission of the board of health, but such permission must be granted when the time allowed as hereinbefore specified the alterations and repairs required to be made by the board of health shall have been made.

SEC. 10. Upon the written application therefor of the board of health, the health commissioner shall allow and order paid out of such fund as the health commissioner may lawfully specify any sums the expenditure of which may be necessary for the enforcement of this ordinance, and the auditor shall audit and the treasurer shall pay such sums so allowed and ordered paid, and the amount so expended shall become a lien upon the property upon which said nuisance was abated in accordance with the provisions of this ordinance. And said amount may be recovered by an action against said property or the owner thereof.

Stables—Prohibited Within 50 Feet of Dwellings, etc. (Ord. 104 N. S., Aug. 24, 1912.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to hereafter construct and maintain within the city of Vallejo, within 50 feet of any residence, dwelling place, schoolhouse, or church, any stable for more than four horses, or to maintain as a stable for more than four horses within 50 feet of any residence, dwelling place, schoolhouse, or church any existing structure not used at the date of the passage of the ordinance for stable purposes.

SEC. 2. Any person, firm, or corporation violating the provisions of this ordinance shall be guilty of a misdemeanor, and on conviction thereof, shall be punished by a fine of not less than \$50 nor more than \$500, or by imprisonment in the county jail not exceeding 6 months, or by both such fine and imprisonment.

Garbage, Manure, etc.—Transportation of. (Ord. 106 N. S., Aug. 28, 1912.)

SECTION 1. It shall be unlawful for any person to use any cart or vehicle for the conveyance or removal of swill, garbage, filth, offal matter of any kind, or any offensive or ill-smelling matter unless the said cart or vehicle is stanch, tight, and closely covered with a wooden or metal cover, so as to wholly prevent leakage or smell; or to use any cart or vehicle for the conveyance or removal of manure or rubbish, unless the said cart or vehicle be provided with a canvas cover securely fastened over the top thereof, and to be so constructed as to prevent the deposit of such manure or rubbish, or any portion thereof, in or upon the streets through which said cart or vehicle may be driven.

SEC. 2. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$50, and in default of the payment of such fine shall be imprisoned in the city jail for not more than 50 days, or by both such fine and imprisonment.

Swine—Keeping of Prohibited Within City Limits. (Ord. 95 N. S., Aug. 23, 1912.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to keep or cause to be kept any swine within the boundaries of the city of Vallejo.

Penalty.—SEC. 2. Any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$60 or by imprisonment in the county jail not to exceed 60 days, or by both such fine and imprisonment.

Deaths—Sudden or Resulting From Criminal Act—Removal or Disposal of Bodies.
(Ord. 108 N. S., Aug. 28, 1912.)

Autopsies in cases of sudden death prohibited except upon permit from coroner.—**SECTION 1.** It shall be unlawful for any person to perform or assist in performing any autopsy or other post-mortem examination upon the body of any person who has died suddenly or whose death has resulted from injury, or upon the bodies of persons found under such circumstances as to lead to a suspicion of crime having been committed, or in cases of accidental deaths or suicides, except a permit to perform such autopsy or post-mortem examination has been issued by the coroner.

Removal of body of any person dying suddenly prohibited except on permit of coroner or health officer.—**SEC. 2.** It shall be unlawful for any person to remove, or aid in removing the body of any deceased person from the place where the death of such person has occurred, except permission to remove said body has been granted by the coroner or health officer or a regular licensed physician who has been in attendance upon the deceased for not less than 24 hours prior to death shall have certified that the death was not directly or indirectly the result of criminal causes.

Disposal in any manner of body of deceased person without permit from coroner or health officer prohibited.—**SEC. 3.** It shall be unlawful for any person, except upon authorization by the coroner, or health officer, to dispose of or in any manner to aid in the disposal of, whether by burial, dissection, or otherwise, of the body or parts thereof of any person whose death has resulted from the performance or an effort to perform a criminal abortion.

SEC. 4. It shall be unlawful for any person to obtain or induce or assist others in obtaining or attempt to secure from the proper authorities any permit to inter, remove, or otherwise dispose of the remains of any deceased person, except that the party desiring such permit shall present to the health officer a certificate of death which shall clearly and truthfully show the name and age of decedent, the precise location where the death occurred, and, if the same has been caused by criminal abortion, either as a direct or indirect consequence, the certificate shall so state.

Penalty.—**SEC. 5.** Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than \$500 or by imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

ADDITIONAL COPIES of this publication
may be procured from the SUPERINTEND-
ENT OF DOCUMENTS, Government Printing
Office, Washington, D. C., at 5 cents per copy
Subscription price, per year \$2

